9–14–93
Vol. 58 No. 176

federal register

Tuesday
September 14, 1993

United States
Government
Printing Office
SUPERINTENDENT
OF DOCUMENTS
Washington, DC 20402

OFFICIAL BUSINESS
Penalty for private use, $300

**********3-DIGIT 481

A FR UMISE346U NOV 93 R
UMI SERIALS ACQUISITIONS
300 N ZEEB RD
PO BOX 1346
ANN ARBOR MI 48106

SECOND CLASS NEWSPAPER

Postage and Fees Paid
U.S. Government Printing Office
(ISSN 0097–6326)

9–14–93
Vol. 58 No. 176
Pages 47983–48258

federal register

Tuesday
September 14, 1993

Briefings on How To Use the Federal Register
For information on briefings in Atlanta, GA, and Washington, DC, see announcement on the inside cover of this issue.

FEDERAL REGISTER Published daily, Monday through Friday, (not published on Saturdays, Sundays, or on official holidays), by the Office of the Federal Register, National Archives and Records Administration, Washington, DC 20408, under the Federal Register Act (49 Stat. 500, as amended; 44 U.S.C. Ch. 15) and the regulations of the Administrative Committee of the Federal Register (1 CFR Ch. I). Distribution is made only by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

The **Federal Register** provides a uniform system for making available to the public regulations and legal notices issued by Federal agencies. These include Presidential proclamations and Executive Orders and Federal agency documents having general applicability and legal effect, documents required to be published by act of Congress and other Federal agency documents of public interest. Documents are on file for public inspection in the Office of the Federal Register the day before they are published, unless earlier filing is requested by the issuing agency.

The seal of the National Archives and Records Administration authenticates this issue of the **Federal Register** as the official serial publication established under the Federal Register Act. 44 U.S.C. 1507 provides that the contents of the **Federal Register** shall be judicially noticed.

The **Federal Register** is published in paper, 24x microfiche format and magnetic tape. The annual subscription price for the **Federal Register** paper edition is $375, or $415 for a combined **Federal Register**, Federal Register Index and List of CFR Sections Affected (LSA) subscription; the microfiche edition of the **Federal Register** including the Federal Register Index and LSA is $353; and magnetic tape is $37,500. Six month subscriptions are available for one-half the annual rate. The charge for individual copies in paper form is $4.50 for each issue, or $4.50 for each group of pages as actually bound; or $1.50 for each issue in microfiche form; or $175.00 per magnetic tape. All prices include regular domestic postage and handling. International customers please add 25% for foreign handling. Remit check or money order, made payable to the Superintendent of Documents, or charge to your GPO Deposit Account, VISA or MasterCard. Mail to: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250–7954.

There are no restrictions on the republication of material appearing in the **Federal Register.**

How To Cite This Publication: Use the volume number and the page number. Example: 58 FR 12345.

SUBSCRIPTIONS AND COPIES

PUBLIC

Subscriptions:

Paper or fiche	202–783–3238
Magnetic tapes	512–1530
Problems with public subscriptions	512–2303

Single copies/back copies:

Paper or fiche	783–3238
Magnetic tapes	512–1530
Problems with public single copies	512–2457

FEDERAL AGENCIES

Subscriptions:

Paper or fiche	523–5243
Magnetic tapes	512–1530
Problems with Federal agency subscriptions	523–5243

For other telephone numbers, see the Reader Aids section at the end of this issue.

THE FEDERAL REGISTER
WHAT IT IS AND HOW TO USE IT

FOR: Any person who uses the Federal Register and Code of Federal Regulations.

WHO: The Office of the Federal Register.

WHAT: Free public briefings (approximately 3 hours) to present:

1. The regulatory process, with a focus on the Federal Register system and the public's role in the development of regulations.
2. The relationship between the Federal Register and Code of Federal Regulations.
3. The important elements of typical Federal Register documents.
4. An introduction to the finding aids of the FR/CFR system.

WHY: To provide the public with access to information necessary to research Federal agency regulations which directly affect them. There will be no discussion of specific agency regulations.

ATLANTA, GA

When: September 15 at 9:30 a.m.
Where: Jimmy Carter Presidential Library
One Copenhill Avenue, Atlanta, GA
Reservations: Federal Information Center
1–800–347–1997

WASHINGTON, DC

(two briefings)

When: September 17 at 9:00 am and 1:30 pm
Where: Office of the Federal Register, 7th Floor Conference Room, 800 North Capitol Street NW, Washington, DC (3 blocks north of Union Station Metro)
Reservations: 202–523–4538

Printed on recycled paper containing 100% post consumer waste

Contents

Federal Register

Vol. 58, No. 176

Tuesday, September 14, 1993

Agricultural Marketing Service
RULES
Soybean promotion, research, and consumer information, 47983

Agriculture Department
See Agricultural Marketing Service
See Animal and Plant Health Inspection Service
See Forest Service

Animal and Plant Health Inspection Service
RULES
Livestock and poultry disease control:
Animals destroyed because of brucellosis; CFR correction, 47984
PROPOSED RULES
Exportation and importation of animals and animal products:
Horses, ruminants, and swine; quarantine fee, 48003
NOTICES
Environmental statements; availability, etc.:
Genetically engineered organisms; field test permits—
Bentgrass plants, etc., 48031
Veterinary biological products; production and establishment licenses, 48031

Army Department
NOTICES
Environmental statements; availability, etc.:
Base realignments and closures—
Detroit Arsenal, MI, et al., 48041

Arts and Humanities, National Foundation
See National Foundation on the Arts and the Humanities

Civil Rights Commission
NOTICES
Senior Executive Service:
Performance Review Board; membership, 48033

Coast Guard
RULES
Ports and waterways safety:
Boston Inner Harbor, MA; safety zone, 47990
Lower Hudson River, NY; safety zone, 47991
M/V Empire Knight, Boon Island, ME, 47988
Route 450 Severn River Bridge, MD; safety zone, 47989
Santa Cruz Island, CA; security zone, 47987

Commerce Department
See Export Administration Bureau
See International Trade Administration
See National Oceanic and Atmospheric Administration

Committee for the Implementation of Textile Agreements
NOTICES
Cotton, wool, and man-made textiles:
Oman, 48039
Pakistan, 48039
Qatar, 48040

Comptroller of the Currency
PROPOSED RULES
Risk-based capital standards:
Interest rate risk, 48206
NOTICES
Financial institutions, U.S.; foreign treatment, 48088

Defense Department
See Army Department
See Uniformed Services University of the Health Sciences

Education Department
NOTICES
Grants and cooperative agreements; availability, etc.:
Individuals with disabilities—
Technology, educational media, and materials program, 48041, 48246
Postsecondary education—
Programs for individuals with disabilities, 48042, 48250

Employment and Training Administration
NOTICES
Adjustment assistance:
Villa Fashions, Inc., 48079

Energy Department
See Energy Information Administration
See Federal Energy Regulatory Commission
See Hearings and Appeals Office, Energy Department
RULES
Energy Department property; trespassing; criminal fines, 47984
NOTICES
Environmental statements; availability, etc.:
Nuclear Weapons Complex; nonnuclear functions consolidation, 48043
Grant and cooperative agreement awards:
Institute for Paper Science and Technology, 48053
Grants and cooperative agreements; availability, etc.:
Electric power or heat generated from geothermal energy in hot dry rock; prototype production and marketing facility development project, 48052
Environmental technology community college educational bridge program, 48053

Energy Information Administration
NOTICES
Agency information collection activities under OMB review, 48054

Environmental Protection Agency
PROPOSED RULES
Hazardous waste:
Land disposal restrictions—
Newly identified and listed hazardous wastes and soil, 48092
Superfund program:
Solid waste and hazardous waste recycling; definition—
Meetings, 48012

NOTICES
Meetings:
Ozone and related photochemical oxidants; air quality criteria; workshops, 48063
Science Advisory Board, 48063, 48064

Equal Employment Opportunity Commission
NOTICES
Agency information collection activities under OMB review, 48064

Executive Office of the President
See Presidential Documents

Export Administration Bureau
NOTICES
National security import investigations:
Ceramic semiconductor packages, 48033

Federal Aviation Administration
RULES
Airworthiness directives:
Boeing; correction, 47986
PROPOSED RULES
Airworthiness directives:
Airbus Industrie, 48009
SAAB-SCANIA, 48010

Federal Deposit Insurance Corporation
PROPOSED RULES
Risk-based capital standards:
Interest rate risk, 48206
NOTICES
Agency information collection activities under OMB review, 48065

Federal Emergency Management Agency
RULES
Disaster assistance:
Costs eligibility, 47994
Private nonprofit facilities eligibility, 47992
Radiological emergency planning preparedness; memorandum of understanding with NRC, 47996
NOTICES
Disaster and emergency areas:
Kansas, 48065
Missouri, 48065
South Dakota, 48065
Wisconsin, 48065

Federal Energy Regulatory Commission
NOTICES
Environmental statements; availability, etc.:
Consumers Power Co., 48058
Natural Gas Policy Act:
State jurisdictional agencies tight formation recommendations; preliminary findings—Land Management Bureau, 48058
Applications, hearings, determinations, etc.:
Algonquin Gas Transmission Co., 48059
Arkla Energy Resources Co., 48059
Caprock Pipeline Co., 48060
Carnegie Natural Gas Co. et al., 48060
CNG Transmission Corp., 48060
Mid Louisiana Gas Co., 48060
Paiute Pipeline Co., 48061
Texas Eastern Transmission Corp., 48061
Texas Gas Transmission Corp., 48062
Transcontinental Gas Pipe Line Corp., 48062
Viking Gas Transmission Co., 48062
Western Gas Interstate Co., 48062
Williams Natural Gas Co., 48063

Federal Reserve System
RULES
Procedure rules:
Applications for merger, consolidation, or acquisition of assets or assumption of liabilities; notice publication requirements, 47985
PROPOSED RULES
Risk-based capital standards:
Interest rate risk, 48206
NOTICES
Meetings; Sunshine Act, 48090
Applications, hearings, determinations, etc.:
Colonial BancGroup, Inc., et al., 48066
First National Bank Shares, Ltd., 48067
Gunn, Allen D., et al., 48067
Huntington Bancshares Inc. et al., 48067

Federal Transit Administration
NOTICES
Environmental statements; availability, etc.:
Vasona Corridor Light Rail Transit Project, CA, 48085

Financial Management Service
See Fiscal Service

Fiscal Service
NOTICES
Surety companies acceptable on Federal bonds:
United Pacific Insurance Co., 48088

Fish and Wildlife Service
PROPOSED RULES
Endangered and threatened species:
Pendant kihi fern, etc. (12 Hawaiian plants), 48012

Forest Service
NOTICES
Appeal exemptions; timber sales:
Nez Perce National Forest, ID, 48032

Health and Human Services Department
See Health Resources and Services Administration
See Inspector General Office, Health and Human Services Department
See National Institutes of Health

Health Care Financing Administration
See Inspector General Office, Health and Human Services Department

Health Resources and Services Administration
NOTICES
Grants and cooperative agreements; availability, etc.:
Model State-supported area health education centers program, 48068

Hearings and Appeals Office, Energy Department
NOTICES
Cases filed, 48042

Inspector General Office, Health and Human Services Department
NOTICES
Program exclusions; list, 48073

Interior Department
See Fish and Wildlife Service
See Land Management Bureau
See National Park Service

International Trade Administration
NOTICES
Antidumping:
Corrosion-resistant carbon steel flat products from—
Canada, 48037
Ferrosilicon from—
Egypt, 48037
Countervailing duties:
Cotton shop towels from—
Pakistan, 48037

Interstate Commerce Commission
NOTICES
Rail carriers:
Waybill data; release for use, 48078
Railroad operation, acquisition, construction, etc.:
Delaware-Lackawanna Railroad Co., Inc., 48077
Genesee Valley Transportation Co., Inc., 48078
Kansas City Southern Railway Co., 48079
Providence & Worcester Railroad Co., 48078

Labor Department
See Employment and Training Administration

Land Management Bureau
NOTICES
Geothermal resource areas:
Oregon, 48073
Goshute Indian Reservation, UT; public lands and interest; correction, 48074
Realty actions; sales, leases, etc.:
New Mexico, 48075
Utah, 48076
Wyoming, 48074

National Foundation on the Arts and the Humanities
NOTICES
Meetings:
Music Advisory Panel, 48079
Theater Program Task Force, 48080

National Highway Traffic Safety Administration
NOTICES
Motor vehicle safety standard:
Nonconforming vehicles—
Importation eligibility; determinations, 48086

National Institutes of Health
NOTICES
Grants and cooperative agreements; availability, etc.:
Adenosine derivatives biomedical use, 48069
Inventions, Government-owned; availability for licensing, 48070
Meetings:
National Cancer Institute, 48071, 48072
National Institute of Allergy and Infectious Diseases, 48071
National Institute on Deafness and Other Communication Disorders, 48072
Patent licenses; non-exclusive, exclusive, or partially exclusive:
Endotracheal tubing; apparatus and method of making, etc., 48072

National Oceanic and Atmospheric Administration
RULES
Fishery conservation and management:
Ocean salmon off coasts of Washington, Oregon, and California, 48001
NOTICES
Permits:
Marine mammals; correction, 48039

National Park Service
NOTICES
National Register of Historic Places:
Pending nominations, 48077
Organization, functions, and authority delegations:
Land Resources Office, Chief, et al., 48077

National Science Foundation
NOTICES
Meetings:
Mathematical Sciences Special Emphasis Panel, 48080

Nuclear Regulatory Commission
PROPOSED RULES
Radioactive wastes; licensing requirements:
Independent spent fuel storage installations and monitored retrievable storage installation; notification of events, 48004
Spent nuclear fuel and high-level radioactive waste; independent storage licensing requirements:
Interim storage in independent installation; site-specific license to qualified applicant, 48004
NOTICES
Meetings; Sunshine Act, 48090
Staff meetings open to public; policy statement, 48080
Applications, hearings, determinations, etc.:
Power Authority of State of New York, 48082

Presidential Documents
EXECUTIVE ORDERS
Government agencies and employees:
Executive branch internal regulations; elimination of one-half (EO 12861), 48255
Setting customer service standards (EO 12862), 48257

Public Health Service
See Health Resources and Services Administration
See National Institutes of Health

Research and Special Programs Administration
NOTICES
Meetings:
International standards on transport of dangerous goods, 48087

Securities and Exchange Commission
NOTICES
Self-regulatory organizations; unlisted trading privileges:
Chicago Board Options Exchange, Inc., 48083
Applications, hearings, determinations, etc.:
Air Methods Corp., 48083
BioSafety Systems, Inc., 48084

Small Business Administration
NOTICES
Agency information collection activities under OMB review, 48084
Disaster loan areas:
Iowa, 48084

Kansas, 48085
Minnesota, 48085
Missouri, 48085
Nebraska, 48085

Textile Agreements Implementation Committee
See Committee for the Implementation of Textile Agreements

Transportation Department
See Coast Guard
See Federal Aviation Administration
See Federal Transit Administration
See National Highway Traffic Safety Administration
See Research and Special Programs Administration

Treasury Department
See Comptroller of the Currency
See Fiscal Service

Uniformed Services University of the Health Sciences
NOTICES
Meetings; Sunshine Act, 48090

United States Information Agency
NOTICES
Art objects, importation for exhibition:
Age of Baroque in Portugal, 48089

United States Institute of Peace
NOTICES
Meetings; Sunshine Act, 48090

Separate Parts In This Issue

Part II
Environmental Protection Agency, 48092

Part III
Department of the Treasury, Comptroller of the Currency; Federal Reserve System; Federal Deposit Insurance Corporation, 48206

Part IV
Department of Education, 48246

Part V
Department of Education, 48250

Part VI
The President, 48253

Reader Aids
Additional information, including a list of public laws, telephone numbers, and finding aids, appears in the Reader Aids section at the end of this issue.

Electronic Bulletin Board
Free Electronic Bulletin Board service for Public Law numbers, Federal Register finding aids, and a list of Clinton Administration officials is available on 202–275–1538 or 275–0920.

CFR PARTS AFFECTED IN THIS ISSUE

A cumulative list of the parts affected this month can be found in the Reader Aids section at the end of this issue.

3 CFR

Executive Orders:

12861.....48255
12862.....48257

7 CFR

1220.....47983

9 CFR

51.....47984

Proposed Rules:

92.....48003

10 CFR

860.....47984

Proposed Rules:

2.....48004
72 (2 documents).....48004

12 CFR

262.....47985

Proposed Rules:

3.....48206
208.....48206
325.....48206

14 CFR

39.....47986

Proposed Rules:

39 (2 documents).....48009, 48010

33 CFR

165 (5 documents).....47987, 47988, 47989, 47990, 47991

40 CFR

Proposed Rules:

Ch. I.....48012
148.....48092
260.....48092
261.....48092
268.....48092
271.....48092

44 CFR

206 (2 documents).....47992, 47994
353.....47996

50 CFR

661.....48001

Proposed Rules:

17.....48012

Rules and Regulations

Federal Register
Vol. 58, No. 176
Tuesday, September 14, 1993

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 1220

[No. LS–92–004]

RIN 0581–AA78

Rules of Practice Governing Proceedings on Petitions To Modify or To Be Exempted From the Soybean Promotion and Research Order

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: The Soybean Promotion, Research, and Consumer Information Act authorizes a national program of promotion and research to be developed through the promulgation of an Order. Pursuant to the Act, a Soybean Promotion and Research Order has been issued. This final rule adopts without change the interim final rule containing rules of practice governing proceedings on petitions to modify or to be exempted from the Soybean Promotion and Research Order.

EFFECTIVE DATE: October 14, 1993.

FOR FURTHER INFORMATION CONTACT: Ralph L. Tapp, Chief, Marketing Programs Branch; Livestock and Seed Division; AMS, USDA, room 2624–S; P.O. Box 96456; Washington, DC 20090–6456. Telephone number 202/720–1115.

SUPPLEMENTARY INFORMATION:

Prior Document

Interim Final Rule—Rules of Practice Governing Proceedings on Petitions to Modify or To Be Exempted From the Soybean Promotion and Research Order published June 10, 1993 (58 FR 32436).

Regulatory Impact

This final rule was reviewed by the U.S. Department of Agriculture in accordance with Departmental Regulation 1512–1 and the criteria contained in Executive Order No. 12291 and has been determined to be a "non-major" rule because it does not meet the criteria for a major rule as stated in the Order.

This rule has been reviewed under Executive Order 12778, Civil Justice Reform. It is not intended to have retroactive effect.

The Act provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 1971 of the Act, a person subject to the Soybean Promotion and Research Order may file with the Secretary a petition stating that the Order, any provision of the Order, or any obligation imposed in connection with the Order is not in accordance with law and requesting a modification of the Order or an exemption from the Order. The petitioner is afforded the opportunity for a hearing on the petition. After a hearing the Secretary would rule on the petition. The statute provides that the district court of the United States in any district in which the person who is a petitioner resides or carries on business has jurisdiction to review a ruling on the petition if a complaint for that purpose is filed not later than 20 days after the date of the entry of the ruling.

Further, section 1974 of the Act provides, with certain exceptions, that nothing in the Act may be construed to preempt or supersede any other program relating to soybean promotion, research, consumer information, or industry information organized and operated under the laws of the United States or any State. One exception in the Act concerns assessments collected by Qualified State Soybean Boards. The exception provides that to ensure adequate funding of the operations of Qualified State Soybean Boards under the Act, no State law or regulation may limit or have the effect of limiting the full amount of assessments that a Qualified State Soybean Board in that State may collect, and which is authorized to be credited under the Act. Another exception concerns certain referenda conducted during specified periods by a State relating to the continuation or termination of a Qualified State Soybean Board or State soybean assessment.

This action was also reviewed under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). This action establishes rules of practice governing proceedings on petitions to modify or be exempted from the Order or any provision thereof. Such petitions could be made by any person subject to the Order desiring to complain that the Order, or a provision of such Order, or any obligation imposed in connection with the Order, is not in accordance with law. The Administrat r of the Agricultural Marketing Service has determined that this action will not have a significant economic impact on a substantial number of small business entities.

The soybean promotion and research program is funded by an assessment of one-half of 1 percent of the net market price of soybeans. First purchasers of soybeans are required to collect assessments from producers. Appropriate recordkeeping and reporting requirements are also provided for in the Order. The term "soybean" means all varieties of Glycine max or Glycine soya.

The interim final rule was published in the **Federal Register** on June 10, 1993, with a request for comments by July 12. No comments were received. Thus, the final rule is unchanged from the interim final rule.

This final rule establishes rules of practice governing petitions to modify or be exempted from the Order. Section 1971 of the Act provides that any person subject to the Order may file a written petition with the Secretary stating that such Order, any provision of such Order, or any obligation imposed in connection with the Order is not in accordance with law. The person may request a modification of such Order or an exemption from certain provisions or obligations of such Order. The person shall be given an opportunity for a hearing on the petition pursuant to the regulations prescribed by the Secretary.

List of Subjects in 7 CFR Part 1220

Administrative practice and procedure, Advertising, Agricultural research, Marketing agreements, Soybeans and soybean products, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, 7 CFR part 1220 is amended as follows:

PART 1220—SOYBEAN PROMOTION, RESEARCH, AND CONSUMER INFORMATION

1. The authority citation for part 1220 continues to read as follows:

Authority: 7 U.S.C. 6301–6311.

2. Accordingly, the interim final rule amending 7 CFR part 1220 which was published at 58 FR 32436 on June 10, 1993, is adopted as a final rule without change.

Dated: September 7, 1993.

L.P. Massaro,

Acting Administrator.

[FR Doc. 93–22421 Filed 9–13–93; 8:45 am]

BILLING CODE 3410-02-P

Animal and Plant Health Inspection Service

9 CFR Part 51

Animals Destroyed Because of Brucellosis

CFR Correction

In title 9 of the Code of Federal Regulations, parts 1 to 199, revised as of Jan. 1, 1993, make the following corrections:

1. On page 145, in § 51.3, footnote "1" contained in paragraphs (a)(3), (b)(1), (2) and (3) should be redesignated to read footnote "3". Footnote "2" contained in paragraphs (b)(1), (2) and (3) should be redesignated to read footnote "4".

2. At the bottom of page 144, the first set of footnotes 3 and 4 should be removed.

BILLING CODE 1505-01-D

DEPARTMENT OF ENERGY

10 CFR Part 860

Trespassing on Department of Energy Property

AGENCY: Office of Security Affairs, Department of Energy.

ACTION: Final rule.

SUMMARY: Today's rule revises the Department of Energy's (DOE) trespassing regulations by adding provisions that set forth criminal fines for trespassing on DOE property. The purpose of this revision is to bring the regulation into conformity with current Federal law. Other technical amendments to the rule are also being made at this time.

EFFECTIVE DATE: October 14, 1993.

FOR FURTHER INFORMATION CONTACT: William J. Desmond, Physical Security Branch, U.S. Department of Energy, Office of Security Affairs, SA–121, Washington, DC 20585, (301) 903–4244.

SUPPLEMENTARY INFORMATION:

A. Discussion of Amendments

Section 860.5 "Violations and Penalties" is amended to recognize the effect by operation of law of the Criminal Fine Improvements Act of 1987, *inter alia*, on the criminal fines that are established by section 229 of the Atomic Energy Act of 1954, as amended, and are restated in § 60.5. Section 860.5(a) will now specify that willful violation of § 860.3 or § 860.4 is an infraction punishable, upon conviction, by a fine of not more than $5,000. Section 860.5(b) will now specify that willful violation of § 860.3 or § 860.4 with respect to any facility, installation or real property enclosed by a fence, wall, floor, roof, or other structural barrier is a Class A misdemeanor punishable, upon conviction, by a fine not to exceed $100,000 or imprisonment for not more than one year, or both. The fines set forth in § 860.5(a) and (b) were previously not more than $1,000 and not more than $5,000, respectively.

DOE also is amending the Authority provision to add references to sections 5 and 6 of the Criminal Fine Improvements Act of 1987. These provisions mandate the increase in the fines set forth in § 860.5. Sections 5 and 6 are codified at 18 U.S.C. 3559 and 18 U.S.C. 3571, respectively.

The title of part 860 is changed from "Trespassing on Administration Property" to "Trespassing on Department of Energy Property" to reflect Government reorganization. The Department of Energy Organization Act of 1978 abolished the Energy Research and Development Administration and transferred the nuclear installations and other property of the Administration to the Department of Energy. While the text of part 860 was previously modified to substitute references to the Department of Energy for references to the Energy Research and Development Administration, the title inadvertently was not updated.

B. Administrative Procedure Act

The DOE has determined that this Final Rule may be promulgated without notice and opportunity for public comment. The only substantive amendment, the increase in the criminal fines set forth in § 860.5, is made to conform the regulations to changes effected in Federal criminal law (including the trespass provisions of the Atomic Energy Act of 1954) by enactment of the Criminal Fine Improvements Act of 1987. The DOE has no discretion over this matter since the increase in fines is mandated by Federal statute and therefore notice and public comment are unnecessary. The amendment to the authority provision and the title are mere technical changes.

C. Regulatory Review

Pursuant to the January 22, 1993, memorandum on the subject of regulatory review from the Director of the Office of Management and Budget (OMB) (58 FR 6074, January 25, 1993), DOE submitted this notice to the Director for appropriate review. The Director has completed his review. Separately, DOE has determined that there is no need for a regulatory impact analysis because the rule is not a major rule as that term is defined in section 1(b) of Executive Order 12291.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act, Public Law 96–354, 94 Stat. 1164 (U.S.C. 601 *et seq.*), requires, in part, that an agency prepare a regulatory flexibility analysis for any final rule unless it determines that the rule will not have a "significant economic impact on a substantial number of small entities." In the event that such an analysis is not required for a particular rule, the agency must publish a certification and an explanation of that determination in the **Federal Register**. This Final Rule merely reflects statutorily mandated increases in Federal criminal fines. The economic impact on small business is negligible. Accordingly, pursuant to section 605(b) of the Regulatory Flexibility Act, DOE certifies that this Final Rule will not have a significant economic impact on a substantial number of small entities.

E. Environmental Review

DOE has determined that this Final Rule is not a major Federal action with significant environmental impact and therefore does not require preparation of an environmental assessment or environmental impact statement under the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq*).

F. Paperwork Reduction Act

No new information or recordkeeping requirements are imposed by this rulemaking. Accordingly, no OMB clearance is required under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*).

List of Subjects in 10 CFR Part 860

Federal buildings and facilities, Security measures, Penalties.

Issued in Washington, DC, September 3, 1993.

George L. McFadden,

Director, Office of Security Affairs.

For the reasons set out in the preamble, part 860 of Chapter III, Title 10 of the Code of Federal Regulations is revised to read as follows:

PART 860—TRESPASSING ON DEPARTMENT OF ENERGY PROPERTY

Sec.

860.1 Purpose.
860.2 Scope.
860.3 Trespass.
860.4 Unauthorized introduction of weapons or dangerous materials.
860.5 Violations and penalties.
860.6 Posting.
860.7 Effective date of prohibition on designated locations.
860.8 Applicability of other laws.

Authority: Sec. 161, 68 Stat. 948, sec. 229, 70 Stat. 1070; (42 U.S.C. 2201; 2278a); sec. 104, 88 Stat. 1237, sec. 105, 88 Stat. 1238 (42 U.S.C. 5814, 5815); sec. 5, Pub. L. 100–185, 101 Stat. 1279 (18 U.S.C. 3559); sec. 6, Pub. L. 100–185, 101 Stat. 1280 (18 U.S.C. 3571); sec. 7041, Pub. L. 100–690, 102 Stat. 4899 (18 U.S.C. 3559).

§ 860.1 Purpose.

The regulations in this part are issued for the protection and security of facilities, installations and real property subject to the jurisdiction or administration, or in the custody of, the Department of Energy.

§ 860.2 Scope.

The regulations in this part apply to all facilities, installations and real property subject to the jurisdiction or administration of the Department of Energy or in its custody which have been posted with a notice of the prohibitions and penalties set forth in this part.

§ 860.3 Trespass.

Unauthorized entry upon any facility, installation or real property subject to this part is prohibited.

§ 860.4 Unauthorized introduction of weapons or dangerous materials.

Unauthorized carrying, transporting, or otherwise introducing or causing to be introduced any dangerous weapon, explosive, or other dangerous instrument or material likely to produce substantial injury or damage to persons or property, into or upon any facility, installation or real property subject to this part, is prohibited.

§ 860.5 Violations and penalties.

(a) Whoever willfully violates either § 860.3 or § 860.4 shall, upon conviction, be guilty of an infraction punishable by a fine of not more than $5,000.

(b) Whoever willfully violates either § 860.3 or § 860.4 with respect to any facility, installation or real property enclosed by a fence, wall, floor, roof, or other structural barrier shall upon conviction, be guilty of a Class A misdemeanor punishable by a fine not to exceed $100,000 or imprisonment for not more than one year, or both.

§ 860.6 Posting.

Notices stating the pertinent prohibitions of §§ 860.3 and 860.4 and penalties of § 860.5 will be conspicuously posted at all entrances of each designated facility, installation or parcel of real property and at such intervals along the perimeter as will provide reasonable assurance of notice to persons about to enter.

§ 860.7 Effective date of prohibition on designated locations.

The prohibitions in §§ 860.3 and 860.4 shall take effect as to any facility, installation or real property on publication in the **Federal Register** of the notice designating the facility, installation or real property and posting in accordance with § 860.6.

§ 860.8 Applicability of other laws.

Nothing in this part shall be construed to affect the applicability of the provisions of State or other Federal laws.

[FR Doc. 93–22450 Filed 9–13–93; 8:45 am]

BILLING CODE 6450–01–P

FEDERAL RESERVE SYSTEM

12 CFR Part 262

[Docket No. R-0810]

Rules of Procedure

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Final rule.

SUMMARY: This regulation changes the publication requirements for notice of applications under the Federal Deposit Insurance Act for the merger, consolidation, or acquisition of assets or the assumption of liabilities, if the acquiring, assuming, or resulting bank will be a state member bank. This change will require that notice be published on least 3 occasions to conform the regulation to the statutory requirements. In addition, the Board is making technical changes to the regulation.

DATES: This rule is effective September 30, 1993. This rule applies to applications filed on or after September 30, 1993.

FOR FURTHER INFORMATION CONTACT: Sidney M. Sussan, Assistant Director, (202-452-2638), Beverly Evans, Supervisory Financial Analyst (202-452-2573), Division of Banking Supervision and Regulation; Patrick J. McDivitt, Attorney (202-452-3818), Legal Division, Board of Governors of the Federal Reserve System. For the hearing impaired *only*, Telecommunications Device for the Deaf (TDD), Dorothea Thompson (202-452-3544), Board of Governors of the Federal Reserve System, 20th and C Street NW., Washington, DC 20551.

SUPPLEMENTARY INFORMATION: Section 18(c) of the Federal Deposit Insurance Act, 12 U.S.C. 1828(c), generally requires that public notice be given when a state member bank seeks to merge or consolidate with a bank or institution, assume certain liabilities including the liability to pay deposits, or transfer assets to a noninsured bank or institution. Section 18(c)(3)(C) requires that the notice be published "at appropriate intervals" during a period of at least thirty days, unless the Board determines that the Board must act immediately in order to prevent the probable default of a state member bank. Currently, the Rules of Procedure of the Board, 12 CFR 262.3(b)(1), require that notice be published only one time.

In light of the statutory language, the Board believes that it is appropriate to revise the notice requirements relating to applications under section 18(c). Accordingly, the Board is amending § 262.3 to require that notice of applications subject to section 18(c) be published at least three times at appropriate intervals and that the last publication appear at least thirty days after the first publication. Other existing procedural requirements relating to publication of notice of these applications will not be affected by this amendment.

The Board is also making technical changes to the regulation to correct a citation, to renumber certain provisions as a result of the change in publication requirements, and to correct a typographical error.

Notice and Public Participation

The provisions of 5 U.S.C. 553 relating to notice and public participation have not been followed in connection with the adoption of this amendment because the changes are technical or result from requirements mandated by statute. For these reasons, the Board finds good cause for determining, and so determines, that

notice and public participation are unnecessary and contrary to the public interest.

Regulatory Flexibility Act Analysis

Pursuant to section 605(b) of the Regulatory Flexibility Act the Board certifies that the amendment will not have a significant economic impact on a substantial number of small entities. The change in publication requirements is not significant as the amendment will require only two additional notices of publication and the economic impact of the additional publications will be minimal.

List of Subjects in 12 CFR Part 262

Administrative practice and procedure.

For the reasons set forth in the preamble, the Board is amending 12 CFR part 262 as follows:

PART 262—RULES OF PROCEDURE

1. The authority citation for part 262 is revised to read as follows:

Authority: 5 U.S.C. 552, 12 U.S.C. 321, 1828(c), and 1842.

2. In § 262.3, paragraph (b)(1)(i)(D) is removed, and paragraphs (b)(1)(i)(E) and (F) are redesignated as paragraphs (b)(1)(i)(D) and (E), respectively, in paragraph (b)(2) the first sentence, the word "applicaition" is corrected to read "application", a new paragraph (b)(3) is added, and paragraph (j), introductory text, is revised to read as follows:

§ 262.3 Applications.

* * * * *

(b) * * *

(3) In the case of an application for a merger, consolidation, or acquisition of assets or assumption of liabilities, if the acquiring, assuming, or resulting bank is to be a State member bank, the applicant shall cause to be published notice in the form prescribed by the Board. The notice shall be published in a newspaper of general circulation in the community or communities in which the head office of each of the banks to be a party to the merger, consolidation, or acquisition of assets or assumption of liabilities is located. The notice shall be published on at least three occasions at appropriate intervals. The last publication of the notice shall appear at least thirty days after the first publication. The notice must provide an opportunity for the public to give written comment on the application to the appropriate Federal Reserve Bank for at least thirty days after the date of the first publication of the notice. Within seven days of publication of notice for the first time, the applicant shall submit its application to the appropriate Reserve Bank for acceptance, along with a copy of the notice. If the Reserve Bank has not accepted the application as complete within ninety days of the date of the first publication of the notice, the applicant may be required to republish notice of the application.

* * * * *

(j) * * * The following types of applications require procedures exclusive of, or in addition to, those described in paragraphs (i)(1) through (5) of this section.

* * * * *

By order of the Board of Governors of the Federal Reserve System, September 7, 1993.

William W. Wiles,

Secretary of the Board.

[FR Doc. 93-22262 Filed 9-13-93; 8:45 am]

BILLING CODE 6210-01-F

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93-NM-103-AD; Amendment 39-8686; AD 93-15-08 R1]

Airworthiness Directives; Boeing Model 737 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects information in an existing airworthiness directive (AD), applicable to Boeing Model 737 series airplanes equipped with certain IPECO pilot and co-pilot seats. The existing AD currently requires an inspection to determine whether the bearings of the tracklock bracket assemblies of the pilot and co-pilot seats are secure, modification of loose bearings, and marking the seat identification label. The actions specified in that AD are intended to prevent the pilot and co-pilot seats from sliding freely on the track, which could lead to the inability of the pilots to control the airplane. This action revises the AD by providing for an alternative identification marking on pilot/co-pilot seats approved for installation on these airplanes.

DATES: Effective August 24, 1993.

The incorporation by reference of certain publications listed in the regulations was previously approved by the Director of the Federal Register as of August 24, 1993 (58 FR 42192, August 9, 1993).

ADDRESSES: The service information referenced in this AD may be obtained from IPECO, Inc., 3882 Del Amo Boulevard, suite 604, Torrance, California 90503. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Roy Boffo, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (206) 227-2780; fax (206) 227-1181.

SUPPLEMENTARY INFORMATION: On August 2, 1993, the FAA issued AD 93-15-08, Amendment 39-8654 (58 FR 42192, August 9, 1993), which is applicable to Boeing Model 737 series airplanes equipped with certain IPECO pilot and co-pilot seats. That AD requires an inspection to determine whether the bearings of the tracklock bracket assemblies of the pilot and co-pilot seats are secure, modification of loose bearings, and marking the seat identification label. That action was prompted by reports of pilot seats failing to lock horizontally due to the tracklock pin bearing becoming detached from its housing and wedged in the mechanism. The actions required by that AD are intended to prevent the pilot and co-pilot seats from sliding freely on the track, which could lead to the inability of the pilots to control the airplane.

Recently, the FAA has become aware of the fact that an alternative identification marking that may appear on pilot/co-pilot seats approved for installation on these airplanes was inadvertently omitted from paragraph (b) of AD 93-15-08. Specifically, paragraph (a)(1) of that AD requires that certain seats must be modified and then marked with "A001-25-74" on the identification label. However, paragraph (b) of that same AD indicates that no seat may be installed unless it has been marked "INSPECTED REF. SBA001-25-74" on the identification label. Clearly, the intent of paragraph (b) was to permit the installation of seats marked with either "INSPECTED REF. SBA001-25-74" or "A001-25-74" on the identification label.

The FAA has determined that it is appropriate to take action to correct paragraph (b) of AD 93-15-08 to permit operators to install pilot/co-pilot seats

that are marked with either one of the two described identification markings.

Action is taken herein to correct the error and to correctly add the AD as an amendment to Section 39.13 of the Federal Aviation Regulations (FAR). The effective date of the rule remains August 23, 1993.

The final rule is being reprinted in its entirety for the convenience of affected operators.

Since this action only provides for the use of an alternative marking on the identification label on pilot/co-pilot seats installed in these airplanes, it has no adverse economic impact and imposes no additional burden on any person. Therefore, notice and public procedures hereon are unnecessary.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Correction

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39–8654 (58 FR 42192, August 9, 1993), and by adding a new airworthiness directive (AD), amendment 39–8686, to read as follows:

93–15–08–R1 Boeing: Amendment 39–8686. Docket 93–NM–103–AD. Revises AD 93–15–08, Amendment 39–8654.

Applicability: Model 737 series airplanes equipped with IPECO, Model 093, pilot and co-pilot seats, having seat serial numbers up to and including 21121; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent the pilot and co-pilot seats from sliding freely on the track, which could lead to the inability of the pilots to control the airplane, accomplish the following:

(a) Within 60 days after the effective date of this AD, perform an inspection to determine whether the bearings of the tracklock bracket assemblies of the pilot and co-pilot seats are secure by attempting to rotate the head of the bearing in either direction in accordance with IPECO Service Bulletin A001–25–74, Issue 2, dated May 6, 1993.

(1) If a bearing rotates in either direction: Prior to further flight, modify the tracklock bracket assembly in accordance with the service bulletin, and mark the seat identification label by service bulletin number, "A001–25–74," using vibro-etch or a similar method in accordance with the service bulletin.

(2) If a bearing does not rotate in either direction: Prior to further flight, mark the seat identification label "INSPECTED REF. SBA001–25–74", using vibro-etch or a similar method in accordance with the service bulletin.

(b) As of the effective date of this AD, no person shall install on any airplane a pilot/co-pilot seat that does not bear "A001–25–74" or "INSPECTED REF. SBA001–25–74" on its identification label.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The inspection, modification, and marking of the seat shall be done in accordance with IPECO Service Bulletin A001–25–74, Issue 2, dated May 6, 1993, which contains the following list of effective pages:

Page No.	Revision level shown on page	Date shown on page
1, 3	2	May 6, 1993.
2, 4–8	1	Apr. 15, 1993.

This incorporation by reference was approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51, as of August 24, 1993 (58 FR 42192, August 9, 1993). Copies may be obtained from IPECO, Inc., 3882 Del Amo Boulevard, suite 604, Torrance, California 90503. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on August 24, 1993.

Issued in Renton, Washington, on September 7, 1993.

David G. Hmiel,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 93–22329 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–13–P

Coast Guard

33 CFR Part 165

[COTP Los Angeles-Long Beach Regulation 93–009]

Security Zone Regulations; Pacific Ocean South of Santa Cruz Island, CA

AGENCY: Coast Guard, DOT.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a Security Zone in the Territorial Waters south of Santa Cruz Island in the vicinity of Yellow Bluff. The zone is needed to safeguard national defense assets against destruction/loss/injury from sabotage or other subversive acts, accidents, or causes of a similar nature while undergoing operational testing. Entry into this zone is prohibited unless authorized by the Captain of Port.

EFFECTIVE DATE: This regulation becomes effective on October 3, 1993 and terminates at midnight on October 15, 1993.

FOR FURTHER INFORMATION CONTACT: CAPT J.B. Morris at 310–980–4429.

SUPPLEMENTARY INFORMATION: In accordance with 5 U.S.C. 553, a Notice of Proposed Rulemaking (NPRM) was not published for this regulation and it is being made effective in less than 30 days after Federal Regulation Publication. Publishing an NPRM and delaying its effective date would be contrary to the public interest since immediate action is needed to prevent destruction/loss/injury to national defense assets involved in operational testing.

Drafting Information

The drafters of this regulation are CAPT J.B. Morris, Captain of the Port, Los Angeles-Long Beach and CAPT B. Weule, Eleventh Coast Guard District Legal Officer.

Discussion of Regulation

The operations requiring this regulation will begin on October 3, 1993. This Security Zone is necessary to ensure the security and safety of national defense assets during operational testing. Entry into the zone may be allowed if testing permits and there are no hazards to transiting vessels or test equipment. Requests to enter the zone should be addressed to the Coast Guard patrol vessel(s) on scene or the representative of the Captain of the Port Los Angeles-Long Beach embarked in the M/V McGAW.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

Regulation

In consideration of the foregoing, subpart D of part 165 of title 33, Code of Federal Regulations, is amended as follows:

PART 165—[AMENDED]

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1225 and 1231; 50 U.S.C. 191; 49 CFR 1.46; and 33 CFR 1.05–1(g), 6.04–1, 6.04–6 and 160.5.

2. A new section 165.T01–109 is added to read as follows:

§ 165.T01–109 Security Zone: Pacific Ocean, California.

(a) *Location.* The following area is a Security Zone: The Territorial Waters south of Santa Cruz Island, California; in the vicinity of Yellow Bluff; bounded on the north by Santa Cruz Island, on the south by latitude 33–56N, on the east by longitude 119–34W, and on the west by longitude 119–41W.

(b) *Effective date.* This regulation becomes effective on October 3, 1993 and terminates at midnight October 15, 1993.

(c) *Regulations.* In accordance with the general regulations in § 165.33 of this part, no person may swim, skin dive, or scuba dive in the waters within the Security Zone, and no vessel may enter, remain in, or transit the Security Zone without the permission of the Captain of the Port. Section 165.33 also contains other general requirements.

Dated: September 7, 1993.

J.B. Morris,

Captain, U.S. Coast Guard, Captain of the Port, Los Angeles/Long Beach.

[FR Doc. 93–22447 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–14–M

---

33 CFR Part 165

[CCGD01–93–119]

Safety Zone Regulations; M/V Empire Knight, Boon Island, ME

AGENCY: Coast Guard, DOT.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a safety zone in the waters one and one half miles southeast of Boon Island, ME, within 2,000 yards of the wreck of the M/V EMPIRE KNIGHT. This zone is needed to protect the maritime community including vessels and personnel involved in an investigation and possible recovery operation. Entry into this zone, or movement within this zone, is prohibited unless authorized by the Captain of the Port, Portland, Maine.

EFFECTIVE DATE: This regulation becomes effective at 6 a.m., August 28, 1993, and terminates at 12 p.m., October 30, 1993, unless terminated sooner by the Captain of the Port.

FOR FURTHER INFORMATION CONTACT: LT A.W. Echols of Captain of the Port, Portland, Maine at (207) 780–3251.

SUPPLEMENTARY INFORMATION:

Drafting Information

The drafters of this regulation are LT A.W. Echols, project officer, Captain of the Port, Portland, Maine, and LCDR J. Stieb, project attorney, First Coast Guard District Legal Office.

Regulatory History

As authorized by 5 U.S.C. 553, a notice of proposed rule making was not published for this regulation and good cause exists for making it effective in less than 30 days after Federal Register publication. Due to the emergency nature of the event, there was not sufficient time to publish proposed rules in advance of the event. Publishing a NPRM and delaying its date would be contrary to the public interest because the event is a search for a possible cargo of mercury and if located, its possible recovery from the wreck of the EMPIRE KNIGHT. If the event were required to be postponed by publishing a NPRM, the survey would have to be delayed approximately nine months due to the expected weather conditions from late October throughout the winter months. Delay would increase the potential for release of the Mercury and the possible danger to the marine environment and recovery personnel would be increased.

Background and Purpose

On February 11, 1944 the British freighter EMPIRE KNIGHT grounded on Boon Island Ledge, off the coast of York, Maine. The stern section broke free and sank in approximately 250 feet of water. According to a plan of stowage, the EMPIRE KNIGHT was to carry 221 flasks of mercury in number 5 cargo hold. The Coast Guard will be conducting an investigation of the wreck to determine the possible presence of mercury. If mercury cargo is found to be on board, it will be removed from the wreck provided it is necessary, feasible and safe to do so. This zone is required to protect the maritime community, including vessels, equipment and personnel associated with this survey and possible recovery operation. The 290 foot pipe lay barge LB–278 and support vessels will be on scene throughout the operation. The zone covers all the waters within 2,000 yards of the stern section of the EMPIRE KNIGHT, located 1.5 miles southeast of Boon Island, Maine. No vessels, divers, or underwater craft will be allowed access to the area without the permission of the Captain of the Port Portland, Maine, or his on scene representative.

Regulatory Evaluation

These regulations are not major under Executive Order 12291 and not significant under Department of Transportation Regulatory Policies and Procedures (44 FR 11040; February 26, 1979).

The event will last approximately two months. The area affected by this event receives infrequent commercial traffic. Because of the relatively remote location of the operation and the extensive advisories which will be made, commercial entities will be able to adjust to any disruptions. The Coast Guard expects the economic impact of this proposal to be so minimal that a Regulatory Evaluation is unnecessary.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), the Coast Guard must consider whether this proposal will have a significant impact on a substantial number of small entities. "Small entities" include independently owned and operated small businesses that are not dominant in their field and that otherwise qualify as "small business concerns" under section 3 of the Small Business Act (15 U.S.C. 632).

For the reasons addressed under the Regulatory Evaluation above, the Coast Guard expects the impact of this regulation to be minimal and certifies under section 605(b) of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) that this final rule will not have a significant economic impact on a substantial number of small entities.

Collection of Information

This rule contains no collection of information requirements under the Paperwork Reduction Act (44 U.S.C. 601 *et seq.*)

Federalism

The Coast Guard has analyzed this action in accordance with the principles and criteria contained in Executive Order 12612, and has determined that these regulations do not raise sufficient

federalism implications to warrant the preparation of a Federalism Assessment.

Environment

The Coat Guard has considered the environmental impact of these regulations and concluded that under section 2.B.2.c of Commandant Instruction M16457.1B, they are an action to protect public safety and they are categorically excluded from further environmental documentation. A Categorical Exclusion Determination will be made available in the docket.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

Temporary Final Regulation

For the reasons set out in the preamble, the Coast Guard amends 33 CFR part 165 as follows:

PART 165—[AMENDED]

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1(g), 6.04–1, 6.04–6 and 160.5; 49 CFR 1.46.

2. A temporary section 165.T01–119 is added to read as follows:

§ 165.T01–119 M/V EMPIRE KNIGHT, Boon Island, Maine.

(a) *Location.* All the waters within 2,000 yards of the stern section of the EMPIRE KNIGHT, located 1.5 miles southeast of Boon Island, Maine, position 43°06.2′ N, 070°27.1′ W.

(b) *Effective date.* This regulation becomes effective at 6 a.m., August 28, 1993 and terminates at 12 p.m. October 30, 1993 unless terminated sooner by the Captain of the Port.

(c) *Regulations.* (1) The general regulations covering safety zones contained in § 165.23 of this part apply.

(2) Divers and manned or unmanned underwater craft are prohibited from entering the zone without the permission of the Captain of the Port Portland, Maine or his on scene representative.

Dated: August 19, 1993.

D.B. Pascoe,

Captain, U.S. Coast Guard, Captain of the Port, Portland.

[FR Doc. 93–22445 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–14–M

33 CFR Part 165

[COTP Baltimore, MD Regulation 93–05–024]

Safety Zone Regulation: Route 450 Severn River Bridge, Annapolis, MD

AGENCY: Coast Guard, DOT.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a safety zone on the Severn River during the installation of support beams on the new route 450 Severn River Bridge by CIANBRO Corporation of Pittsfield, Maine. This safety zone is necessary to control recreational vessel traffic, and to provide for the safety of life and property on U.S. Navigable waters from the hazards associated with this construction operation. Entry into this zone is prohibited unless authorized by the Captain of the Port, Baltimore, MD.

EFFECTIVE DATE: This regulation will become effective at 7 a.m. and terminate at 5 p.m. daily on September 7, 8, 9, 10, 13, 14, 15, 16 and 17, unless sooner terminated by the COTP.

FOR FURTHER INFORMATION CONTACT: Lieutenant Mark Williams at U.S. Coast Guard Marine Safety Office Baltimore, 40 S. Gay Street, Baltimore, Maryland, (410) 962–5100.

SUPPLEMENTARY INFORMATION: In accordance with 5 U.S.C. 553, a Notice of Proposed Rule Making (NPRM) was not published for this regulation and good cause exists for making it effective in less than 30 days after **Federal Register** publication. The construction company did not provide the Coast Guard with sufficient advance notice to allow for the normal rule making process. Publishing a NPRM and delaying its effective date would be contrary to the public interest, since immediate action is needed to protect recreational vessel traffic against potential hazards associated with this construction project to facilitate completion of the bridge.

Drafting Information

The drafters of this regulation are Lieutenant Mark R. Williams, project officer for the Captain of the Port, Baltimore, Maryland and Lieutenant John B. Gately, project attorney, Fifth Coast Guard District Legal Staff.

Background and Purpose

CIANBRO Corporation requested Coast Guard assistance controlling vessel traffic on the Severn River in the vicinity of the bridge project, during placement of bridge support beams. As part of their request, CIANBRO indicated that it will be necessary for the Coast Guard to close the channel while lifting the channel span support beams.

Discussion of Regulation

On August 5, 1993, CIANBRO Corporation made public construction plans and schedule for the erection of structural steel on the new route 450 Severn River Bridge in Annapolis, Maryland. The work involves lifting support beams into place from barge mounted heavylift cranes. While the beams are supported by crane and not secured to the bridge support columns, a severe hazard exists to anyone positioned immediately beneath or near the operation. In order to facilitate the lifts of the Severn River channel span beams, and protect recreational vessel traffic from the hazard associated with the lifts, a safety zone will be established on each of the days the work will be ongoing. This safety zone consists of all waters within 500 feet upstream and downstream of the bridge construction site, located at Latitude 38°59.6′ N, Longitude 076°29.8′ W. This regulation is necessary to facilitate the construction of the new Severn River bridge, ensure the safety of recreational vessels, and to provide for the safety of life and property on U.S. Navigable waters during the bridge construction. Since the Severn River channel will be closed daily for 9 weekdays from 7 a.m. until 5 p.m., vessel traffic will be severely disrupted. Periodic openings will be possible once support beams are adequately secured to surrounding support columns and bridge abutments. The support tug "HELEN E" will remain onscene during the entire operation and will be monitoring VHF channels 13 and 16.

Economic Assessment and Certification

This proposed regulation is considered to be non-major under Executive Order 12291 on Federal Regulation and nonsignificant under Department of Transportation regulatory policies and procedures (44 FR 11034; February 26, 1979). The economic impact of this proposal is expected to be minimal, therefore a full regulatory evaluation is unnecessary. The Coast Guard also considered the impact of this regulation on small entities and concluded that such impact is expected to be minimal Therefore the Coast Guard certifies under 5 U.S.C. 605(b), that this regulation will not have a significant economic impact on a substantial number of small entities.

Federalism Assessment

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12612. This final rule does not raise sufficient federalism implications to warrant the preparation of a Federalism Assessment. This proposal contains no collection of information requirements under the Paperwork Reduction Act (44 U.S.C. 3501 et seq.)

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

Regulations

In consideration of the foregoing, the Coast Guard is amending part 165 of title 33, Code of Federal Regulations as follows:

PART 165—[AMENDED]

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; U.S.C. 191; 33 CFR 1.05–(g), 6.04–1, 6.04–6, and 160.5; 49 CFR 1.46.

2. A temporary § 165.T05–063 is added to read as follows:

165.T05–063 Safety Zone: Route 450 Severn River Bridge, Annapolis, MD.

(a) *Location.* The following area is a safety zone. All waters within 500 feet of either upstream and downstream sides of the bridge construction site located at Latitude 38°59.6′ N, Longitude 076°29.3′ W.

(b) *Definitions.* The designated representative of the Captain of the Port is any Coast Guard commissioned, warrant or petty officer who has been authorized by the Captain of the Port, Baltimore, Maryland to act on his behalf.

(c) *General information.* The Captain of the Port and the Duty Officer at the Marine Safety Office, Baltimore, Maryland may be contacted at telephone number (410) 962–5105. The Coast Guard Patrol Commander and the senior boarding officer on each vessel enforcing the safety zone may be contacted on VHF–FM channels 16 and 13.

(d) *Regulations.* (1) In accordance with the general regulations in § 165.23 of this part, entry into this safety zone is prohibited unless authorized by the Captain of the Port or his designated representative.

(2) The operator of any vessel which enters into or operates in this safety zone shall:

(i) Stop the vessel immediately upon being directed to do so by any commissioned, warrant, or petty officer on board a vessel displaying a Coast Guard Ensign.

(ii) Proceed as directed by any commissioned, warrant, or petty officer on board a vessel displaying a Coast Guard Ensign. Except for persons or vessels authorized by the Coast Guard Patrol Commander, no person or vessel may enter or remain in the regulated area.

(e) *Effective dates.* This regulation is effective from 7 a.m. until 5 p.m. on September 7, 8, 9, 10, 13, 14, 15, 16 and 17, unless sooner terminated by the Captain of the Port, Baltimore, Maryland.

Dated: September 2, 1993.

G.S. Cope,

Captain, U.S. Coast Guard, Captain of the Port, Baltimore, Maryland.

[FR Doc. 93–22448 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–14–M

---

33 CFR Part 165

[CGD01–93–001]

Safety Zone; Boston Inner Harbor, Boston, MA

AGENCY: Coast Guard, DOT.

ACTION: Final rule.

SUMMARY: The Coast Guard is establishing a permanent safety zone around the USS CASSIN YOUNG (DD–793), with the size of the zone varying appropriate to prevailing conditions. This zone is needed to safeguard the USS CASSIN YOUNG as an historic national maritime attraction and to protect other vessels and persons from the risk of collision, damage or personal injury due to the limited maneuverability of the USS CASSIN YOUNG while under tow. Implementation of this safety zone will enhance safe navigation in Boston Harbor by defining permanent operational parameters for public viewing of the USS CASSIN YOUNG (DD–793) when it is underway.

EFFECTIVE DATE: This regulation becomes effective on October 14, 1993.

FOR FURTHER INFORMATION CONTACT: MST1 Daniel J. Dugery, USCG Marine Safety Office Boston, at (617) 223–3000.

SUPPLEMENTARY INFORMATION:

Drafting Information

The principal persons involved in drafting this document are MST1 Daniel J. Dugery, assistant Waterways Management Officer, Captain of the Port of Boston, and Lieutenant Commander Jeffrey Stieb, project attorney, First Coast Guard District Legal Office.

Regulatory History

On May 18, 1993, the Coast Guard published a notice of proposed rulemaking entitled, "SAFETY ZONE; BOSTON INNER HARBOR, BOSTON, MA" in the **Federal Register** (58 FR 28942). The Coast Guard received no comments on the proposal. A public hearing was not requested and one was not held. The Coast Guard Captain of the Port Boston is publishing the final rule as proposed.

Background and Purpose

The USS CASSIN YOUNG (DD–793), a 376 foot World War II Fletcher Class destroyer, operated by the National Park Service in Boston, had a distinguished combat career in the Pacific during World War II and also participated in the Korean Conflict. CASSIN YOUNG now serves as a permanent national memorial to destroyermen and the ships they served on. To protect the vessel, the Captain of the Port (COTP) Boston has routinely established a temporary moving safety zone around the USS CASSIN YOUNG whenever it is underway in Boston Harbor.

The USS CASSIN YOUNG's Columbus Day Turnaround Cruise is an annual event in Boston Harbor. Typically, at 10 a.m. on the Columbus Day weekend, the USS CASSIN YOUNG departs berth at Pier 1, Charlestown Navy Yard, with veterans and visitors on board. The USS CASSIN YOUNG, sometimes joined by other parade vessels, is towed outbound by two tug boats through Boston Inner Harbor to the vicinity of Buoys 2 and 4 off Castle Island. At that point the USS CASSIN YOUNG, and any accompanying parade vessels turn and proceed inbound. Experience has demonstrated that this annual event attracts numerous spectator vessels and may create significant congestion in Boston Harbor. The limited maneuverability of the USS CASSIN YOUNG and other participating vessels while underway for this event poses a hazard for spectator vessels in the area, precipitating the need for a safety zone. A moving safety zone around the USS CASSIN YOUNG (DD–793), and any other associated parade vessels, during the event minimizes the chances of collision with other vessels by eliminating crossing or overtaking situations and helps to provide sufficient maneuvering room for participating vessels. It also minimizes disruption to other vessel traffic, as operators can schedule vessel movements before or after the USS CASSIN YOUNG's transit.

In addition to this annual event, the USS CASSIN YOUNG occasionally gets underway in Boston Harbor for other special events. Like the USS CASSIN YOUNG's Columbus Day Turnaround Cruise, these events are well published and attract many spectator vessels, creating a similar need for a safety zone. Accordingly, the COTP Boston is hereby establishing a permanent moving safety zone for one hundred yards in all directions around the USS CASSIN YOUNG (DD–793) and around each accompanying parade vessel whenever such vessels are underway together in Boston Harbor.

Scheduled movements of the USS CASSIN YOUNG (DD–793) and the names and berthing locations of accompanying parade vessels will be published in the Local Notice to Mariners and in a Safety Marine Information Broadcast. During scheduled events, other marine traffic may not enter the moving safety zone without authorization from the COTP Boston.

Discussion of Comments and Changes

No written comments were received during the comment period. Accordingly, the text of these regulations appears as it did in the notice of proposed rulemaking.

Regulatory Evaluation

This proposal is not major under Executive Order 12291 on Federal Regulations and not significant under Department of Transportation Regulatory Policies and Procedures (44 FR 11040; February 26, 1979). The Coast Guard expects the economic impact of this proposal to be so minimal that a Regulatory Evaluation is unnecessary. The practice of establishing a safety zone to protect CASSIN YOUNG and accompanying parade vessels underway in Boston Harbor has been in effect for many years. Costs to the shipping industry from these regulations, if any, will be minor and have no significant adverse financial effect on vessel operators as the events will normally be of less than three hours duration. Deep draft vessel traffic, fishing vessels, and tour boats may experience slight delays in departures or arrivals during the transit, however, mariners can time their movements just ahead or just after the USS CASSIN YOUNG (DD–793) and accompanying parade vessels have completed their transit.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), the Coast Guard must consider whether this proposal will have a significant economic impact on a substantial number of small entities. "Small entities" include independently owned and operated small businesses that are not dominant in their field and that otherwise qualify as "small business concerns" under section 3 of the Small Business Act (15 U.S.C. 632). For the reasons set forth in the above Regulatory Evaluation, the Coast Guard certifies under 5 U.S.C. 605(b) of the Regulatory Flexibility Act, that this regulation will not have a significant economic impact on a substantial number of small entities.

Collection of Information

This rule contains no collection of information requirements under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*)

Federalism

The Coast Guard has analyzed this proposal in accordance with the principles and criteria contained in Executive Order 12612 and has determined that this proposal does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment. No written comments relating to this section were received, and the regulatory text remains unchanged.

Environment

The Coast Guard considered the environmental impact of this proposal and concluded under section 2.B.2.C of Commandant Instruction M16475.1B, this rulemaking is categorically excluded from further environmental documentation. In fact, implementation of this rulemaking should help to preserve a national historic landmark and protect the environment by reducing the risk of collision or other marine accidents. A Categorical Exclusion Determination is available in the docket for inspection or copying where indicated under **ADDRESSES**.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and record keeping requirements, Security measures, Waterways.

Regulation

In consideration of the foregoing, 33 CFR part 165 is amended as follows:

PART 165—REGULATED NAVIGATION AREAS AND LIMITED ACCESS AREAS

1. The authority citation for part 165 continues to read:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 49 CFR 1.46 and 33 CFR 1.05–1(g), 6.04–1, 6.04–6 and 160.5.

2. A new § 165.112 is added to read as follows:

§ 165.112 Safety Zone: USS CASSIN YOUNG, Boston, Massachusetts.

(a) *Location.* The following area is a safety zone:

Around the USS CASSIN YOUNG (DD–793) and any accompanying parade vessels when the USS CASSIN YOUNG is underway. The zone extends 100 yards in all directions in the waters around the USS CASSIN YOUNG and accompanying parade vessels whenever the USS CASSIN YOUNG is underway in Boston Harbor from the time the USS CASSIN YOUNG departs its berth until it is safely moored.

(b) *Regulations.* The general regulations governing safety zones as contained in 33 CFR 165.23 apply.

Dated: September 1, 1993.

G.W. Abrams,

Captain, U.S. Coast Guard, Captain of the Port, Boston, Massachusetts.

[FR Doc. 93–22444 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–14–M

---

33 CFR Part 165

[CGD01–93–034]

Safety Zone; New York National Championship Race, NY

AGENCY: Coast Guard, DOT.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a temporary safety zone in the Lower Hudson River, for the New York National Championship Race. The event, sponsored by Super Boat Racing Inc., will take place on Sunday, October 3, 1993 from 12 p.m. until 4 p.m. Temporary closure of the entire Lower Hudson River between Battery Park and Pier 76 in Manhattan is needed to protect the boating public from the hazards associated with high speed powerboats racing in confined waters.

DATES: This rule is effective from 12 p.m. until 4 p.m. on October 3, 1993, with a rain date of October 4, 1993, at the same time.

FOR FURTHER INFORMATION CONTACT: Lieutenant Rosanne Trabocchi, Waterways Management Officer, Coast Guard Group New York (212) 668–7933.

SUPPLEMENTARY INFORMATION:

Drafting Information

The drafters of this notice are LT Rosanne Trabocchi, Project Manager, Captain of the Port, New York and LCDR J. Stieb, Project Attorney, First Coast Guard District Legal Office.

Regulatory History

Pursuant to 5 U.S.C. 553, a notice of proposed rulemaking was not published for this regulation and good cause exists for making it effective in less than 30 days after the **Federal Register** publication. Publishing a NPRM and delaying the date of this event would be contrary to public interest since this program is for the benefit and enjoyment of the public.

Background and Purpose

On April 16, 1993, Super Boat Racing Inc. submitted a request to hold its annual power boat race in the Lower Hudson River. The Coast Guard is establishing a temporary safety zone in the Lower Hudson River for this annual event known as the "New York National Championship Race". This regulation will close all waters of the Lower Hudson River south of a line drawn from Pier 76 in Manhattan to a point located directly opposite on the New Jersey shoreline and north of a line drawn between the Battery in Manhattan and the southernmost point of Ellis Island in the Upper New York Bay.

Regulatory Evaluation

These regulations are not major under Executive Order 12291 and not significant under Department of Transportation Regulatory Policies and Procedures (44 FR 11040; February 26, 1979). This safety zone will close a four mile area in the Lower Hudson River to all vessel traffic between the hours of 12 p.m. and 4 p.m. on October 3, 1993. The Coast Guard expects the economic impact of this proposal to be so minimal that a Regulatory Evaluation is unnecessary for several reasons. The volume of commercial vessel traffic transiting the Lower Hudson River on a Sunday is less than half of the normal daily traffic volume. Pleasure craft desiring to view the race will be directed to designated spectator areas outside the zone. Pleasure craft can take an alternate route through the East River and the Harlem River. In addition, the duration of the event is limited to four hours and extensive advisories will be made to the affected maritime community.

Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), the Coast Guard must consider whether this regulation will have a significant economic impact on a substantial number of small entities. "Small entities" include independently owned and operated small businesses that are not dominant in their field and that otherwise qualify as "small business concerns" under Section 3 of the Small Business Act (15 U.S.C. 632).

For the reasons given in the Regulatory Evaluation, the Coast Guard expects the impact of this regulation to be minimal. The Coast Guard certifies under 5 U.S.C. 605(b) that this regulation will not have a significant economic impact on a substantial number of small entities.

Collection of Information

This proposal contains no collection of information requirements under the Paperwork Reduction Act (44 U.S.C. 3501).

Federalism

The Coast Guard has analyzed this action in accordance with the principles and criteria contained in Executive Order 12612 and has determined that this regulation does not raise sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Environment

The Coast Guard considered the environmental impact of this regulation and concluded that under section 2.B.2.c. of Commandant Instruction M16475.1B, it is an action under the Coast Guard's statutory authority to protect public safety, and thus is categorically excluded from further environmental documentation. A Categorical Exclusion Determination will be available in the docket.

List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

Regulations

For reasons set out in the preamble, the Coast Guard proposes to amend 33 CFR part 165 as follows:

PART 165—[AMENDED]

1. The authority citation for part 165 continues to read as follows:

Authority: 33 U.S.C. 1231; 50 U.S.C. 191; 33 CFR 1.05–1(g), 6.04–1, 6.04–6, and 160.5, 49 CFR 1.46.

2. A temporary § 165.T01–034 is added to read as follows:

§ 165.T01–034 Safety Zone; New York National Championship Race, New York and New Jersey.

(a) *Location.* The safety zone includes all waters of the Lower Hudson River south of a line drawn between Pier 76 Manhattan and a point on the New Jersey shore in Weehawken, New Jersey at 40°45'52" N latitude 74°01'01" W longtitude, and north of a line connecting the following points beginning at:

Latitude	Longitude
40°42'16.0" N .	074°01'09.0" W, then south to
40°41'55.0" N .	074°01'16.0" W, then west to
40°41'47.0" N .	074°01'36.0" W, then northwest to
40°41'55.0" N .	074°01'59.0" W, then to shore at
40°42'20.5" N .	074°02'06.0" W.

(b) *Effective period.* This regulation will be effective from 12 p.m. until 4 p.m. on October 3, 1993, with a raindate of October 4, 1993 at the same time.

(c) *Regulations.* (1) No person or vessel may enter, transit, or remain in the regulated area during the effective period of regulation unless authorized by the U. S. Coast Guard Captain of the Port, New York.

(2) All persons and vessels shall comply with the instructions of the Coast Guard Captain of the Port or the designated on scene personnel. U.S. Coast Guard patrol personnel include commissioned, warrant, and petty officers of the Coast Guard as well as Coast Guard Auxiliary personnel. Upon being hailed by a U.S. Coast Guard vessel or Coast Guard Auxiliary vessel via siren, radio, flashing light, or other means, the operator of a vessel shall proceed as directed.

Dated: August 24, 1993.

T. H. Gilmour,

Captain, U.S. Coast Guard; Captain of the Port, New York.

[FR Doc. 93–22446 Filed 9-13–93; 8:45 am]

BILLING CODE 4910–14–M

FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Part 206

RIN 3067–AB86

Disaster Assistance; Eligibility of Private Nonprofit Facilities

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Final rule.

SUMMARY: The Federal Emergency Management Agency (FEMA) is changing the eligibility of private nonprofit facilities for disaster assistance grants made under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). The rule is intended to clarify the statutory term

"essential services of a governmental nature" as applied to private nonprofit facilities, and to limit the types of private nonprofit organizations eligible for disaster assistance under the Stafford Act.

EFFECTIVE DATE: October 14, 1993.

FOR FURTHER INFORMATION CONTACT: Laurence W. Zensinger, Chief, Public Assistance Division, room 714, 500 C Street, SW., Washington, DC 20472, (202) 646–4240.

SUPPLEMENTARY INFORMATION: The Stafford Act added a new category of private nonprofit (PNP) facility eligible for assistance, namely, "facilities which provide essential services of a governmental nature to the general public." On April 30, 1992, FEMA published in the **Federal Register** at 57 FR 18441 a Proposed Rule, and invited comments for 60 days ending on June 29, 1992.

Comments were received from 23 sources representing State and local governments, private nonprofit organizations and others. The regulation proposed to limit the facilities that qualify as private, nonprofit organizations to "museums, zoos, community centers, libraries, homeless shelters, senior citizen centers, rehabilitation facilities and shelter workshops which are open to the general public." This list of facilities is a list of examples from House Report No. 100–517, which accompanied H.R. 2707 (the bill which became the Stafford Act).

A frequent general comment was that the Congress intended to provide flexibility in determining eligible PNPs that provide essential services of a government nature. Limiting the eligible PNPs to only those on the list of examples was not the intent of Congress. The history of PNPs under the Stafford Act is briefly discussed in addressing this comment.

The law contains no further definition of what is included in the category of "facilities which provide essential services of a governmental nature to the general public". However, House Report No. 100–517, which accompanied H.R. 2707 (the bill which became the Stafford Act), provides a list of examples of eligible facilities. The list includes facilities such as "museums, zoos, community centers, rehabilitation facilities and shelter workshops."

Since passage of the Stafford Act, FEMA has used the list from House Report No. 100–517 to determine whether other facilities, which perform a similar function to those on the list, are eligible facilities. For example, theaters and other performing arts have been considered eligible because they perform a cultural function similar to a museum. FEMA has also considered as eligible facilities, facilities such as parking facilities, which some governmental entities provide.

The floor debates of this bill contain only one reference to what facilities should be included. Mr. Stangeland, on October 21, 1988 stated: "We have added the term 'essential services of a governmental nature to the general public' to provide flexibility, not to encourage unsupported, broad-reaching expansions of the definition."

Since passage of the Stafford Act, FEMA has considered as eligible PNP facilities both facilities which are the same as those provided by some government entities and PNP facilities which have a similar function to the list of examples from the House Report. By doing this FEMA considerably expanded the definition of facilities which provide "essential services of a governmental nature to the general public."

As previously noted, numerous comments were made that the proposed rule limits eligible facilities to a list of examples that was not intended by Congress to be all inclusive. FEMA agrees with the comment. However, to avoid the broad-reaching expansion of the definition cautioned against in the floor debate, regulations need to address the issue of what are "essential services of a governmental nature".

Defining "essential services of a governmental nature", is difficult because of the wide range of services that different State and local governments provide. One government may provide limited government services such as fire and police protection, while another government may provide extensive recreation, educational and cultural services. To complicate the situation further, a local government might not provide a service, because a PNP in the community already provides the service.

To maintain consistency, essential government services are defined in this rule in addition to those facilities listed in the House Report, as facilities whose primary purpose is the provision of health and safety services. Health and safety services are essential services that are commonly provided by all local governments and which directly affect the health and safety of individuals. Low-income housing, alcohol and drug rehabilitation, programs for battered spouses, transportation to medical facilities, and food programs are examples of health services under this definition. Examples of ineligible services or facilities are: recreational services, job counseling or job training, advocacy groups not directly providing health services, conference facilities, performing arts, and other groups not providing health or safety services. The proposed regulation is changed to include in the definition of essential governmental services those facilities that provide health and safety services and are open to the general public.

Other comments addressed a particular PNP or a type of PNP that should be considered as an eligible facility. The case was presented that some PNPs provide vital services, services which are sometimes in great demand after a disaster, and communities rely on the many services provided by PNPs. Theaters and various PNPs providing social services, have been eligible for assistance since the Stafford Act and have made strong cases for public support. However worthwhile the PNP, FEMA must rely on the language of the Stafford Act to determine whether the PNP provides "essential services of a governmental nature to the general public." To ensure consistency in determining eligibility for assistance, FEMA is justified in clearly defining essential services. This will result in many PNPs being excluded from the definition. The justification for this definition is discussed in the preceding paragraph.

One comment was made that the proposed regulation does not recognize the different needs of different communities and should be delayed until the States can be consulted. The final rule's definition of eligible facilities, including those that provide health and safety services to the community, should be sufficiently broad to address the different needs of communities in various parts of the country.

The comment period provided the opportunity for the general public and governmental entities to respond to the proposed rule. FEMA believes this period was adequate and that no further consultation is needed.

National Environmental Policy Act

An environmental assessment has been prepared, leading to the determination that this rule will not have a significant impact on the environment and that an Environmental Impact Statement is not required. The assessment is available for review at the Office of the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

Regulatory Flexibility Act

The Director certifies that this rule is not a major rule under Executive Order 12291, and will not have a significant impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act, and is not expected (1) To adversely affect the availability of disaster assistance funding to small entities, (2) to have significant secondary or incidental effects on a substantial number of small entities, nor (3) to create any additional burden on small entities. Hence, no regulatory impact analysis has been prepared.

Paperwork Reduction Act

This rule does not involve any collection of information for the purposes of the Paperwork Reduction Act.

Executive Order 12612, Federalism

In promulgating this rule, FEMA has considered the President's Executive Order 12612 on Federalism. This rule makes no changes in the division of governmental responsibilities between the Federal government and the States. Grant administration procedures in accordance with 44 CFR part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, remain the same. No Federalism assessment has been prepared.

Executive Order 12778, Civil Justice Reform

This rule meets the applicable standards of section 2(b)(2) of Executive Order 12778, Civil Justice Reform, dated October 25, 1991, 3 CFR, 1991 Comp., p. 359.

List of Subjects in 44 CFR Part 206

Disaster Assistance, Public Assistance.

Accordingly, 44 CFR part 206 is amended as follows:

PART 206—[AMENDED]

1. The authority citation for part 206 continues to read a follows:

Authority: The Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq.; Reorganization Plan No. 3 of 1978, 5 U.S.C. App. 1; E.O. 12148, 3 CFR, 1979 Comp., p. 412; and E.O. 12673, 3 CFR, 1989 Comp., p. 214.

2. Section 206.221 is amended by revising paragraph (e)(6) to read as follows:

§ 206.221 Definitions.

* * * * *

(e) * * *

(6) *Other essential governmental service facility* means museums, zoos, community centers, libraries, homeless shelters, senior citizen centers, rehabilitation facilities, shelter workshops and facilities which provide health and safety services of a governmental nature. All such facilities must be open to the general public.

* * * * *

Dated: September 7, 1993.

James L. Witt,

Director.

[FR Doc. 93-22432 Filed 9-13-93; 8:45 am]

BILLING CODE 6718-02-P

---

44 CFR Part 206

RIN 3067-AB85

Disaster Assistance; Eligibility of Costs

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Final rule.

SUMMARY: The Federal Emergency Management Agency (FEMA) is changing the eligibility of costs which may be claimed in the performance of work under a disaster assistance grant. It changes to $1000 the minimum dollar amount of damages eligible for disaster assistance, and makes straight-time force labor account costs of permanent employees ineligible for assistance. The changes are intended to improve program efficiency, and to clarify that only direct, additional costs caused by the disaster are eligible for assistance.

EFFECTIVE DATE: October 14, 1993.

FOR FURTHER INFORMATION CONTACT: Laurence W. Zensinger, Chief, Public Assistance Division, room 714, 500 C Street, SW., Washington, DC 20472, (202) 646-4240.

SUPPLEMENTARY INFORMATION: On April 30, 1992, FEMA published a proposed rule in the **Federal Register** at 57 FR 18442, and invited comments for 60 days ending on June 29, 1992. The proposed rule made two changes affecting federal disaster assistance: the one proposed change to the eligible force labor account costs for emergency work, and the other proposed change to the minimum threshold of damage used to determine eligible damage sites. Comments were received from 38 sources representing State and local governments and others.

Force Account Labor Costs

When an applicant for disaster assistance performs emergency response or recovery work using regularly employed personnel, the term for the practice is "force account labor." The proposed change makes the cost of straight-time salaries and benefits of force account labor used in emergency response ineligible for assistance. A frequent comment was that the proposed change undermines Congress' intent to give minimum assistance of 75 percent for eligible costs.

The Stafford Act, section 403(b), 42 U.S.C. 5170b, states, "The Federal share of assistance under this section shall be not less than 75 percent of the eligible cost of such assistance." FEMA agrees with the commentators that it must provide minimum assistance of 75 percent of the eligible cost of assistance. However, FEMA can define eligible costs.

The authority for FEMA determining eligible costs is stated in Office of Management and Budget (OMB) Circular A-87, Principles for Determining Costs Applicable to Grants and Contracts with State, Local, and Federally Recognized Indian Tribal Governments. This circular is incorporated into 44 CFR part 13, Uniform Administrative Requirements to State and Local Governments. Paragraph A.1. of the circular states in part: "The principles (of this circular) are for the purposes of cost determination and are not intended to identify the circumstances or dictate the extent of Federal and State or local participation in the financing of a particular grant."

The granting agency may determine which particular costs will be eligible for reimbursement under a grant program unless the authorizing statute provides otherwise. Based on the statute not specifically discussing eligible force-account labor costs for emergency work, as it does for permanent work, we conclude that Congress has authorized FEMA to define eligible costs.

Comments Received on the Proposed Rule

(1) *Costs to the applicant.* The most frequent comment concerns the costs and related issues in diverting employees from their normal duties to perform disaster related emergency work. Commentators dispute FEMA's assertion that (just considering the straight- or regular-time salaries of force-account labor involved in emergency work) there is no incremental cost to the applicant because of the disaster since the straight-time salary costs would be incurred whether or not the disaster occurred.

Comments note that a normal work force providing emergency response during a disaster is unable to accomplish its normal duties. These

deferred duties must be accomplished at a later date at a real cost to the applicant, or if not accomplished, they will have an adverse effect on the community.

FEMA agrees that some normally scheduled force account work may be deferred to provide emergency response. Other deferred work, such as a police patrol, cannot be accomplished later. It also is true, however, that reduced future maintenance by force account labor may be required on facilities damaged in the disaster that have been repaired or replaced. As an example, a road that has been damaged and repaved will not need the same maintenance by an applicant's permanent work force. In considering the additional costs to the applicant of this emergency work, FEMA opts to consider only the direct additional expenses of the applicant. Deferred work may or may not be accomplished by the applicant in the future. Federal disaster assistance is intended to supplement state and local efforts, and the costs of deferred work may or may not be spent by the applicant in the future. A reasonable criterion for eligibility of emergency work is that additional funds be spent by the applicant. This criterion ensures that two objectives are met; that federal assistance supplements state and local efforts, and that only additional expenses directly caused by the disaster are eligible for assistance. Meeting these objectives justifies the change in this regulation.

(2) *Consequences of the regulation.* Commentators note that the results of using force account labor for emergency work include: deferred work is contracted out or accomplished with overtime later at a higher cost; normal projects are delayed or eliminated; delay of maintenance causes more costly maintenance in the future.

Current FEMA policy, the comments note, provides assistance which helps avoid these problems. The proposed changes make the same work (for example, debris removal) eligible for assistance if accomplished as overtime by force account labor or by contract, but ineligible if accomplished by force account labor on a straight-time basis The comments note that FEMA is encouraging applicants to rely on overtime and contract work (at an increased cost) to accomplish emergency work.

If the applicant has the time to choose a course of action, FEMA agrees that contracting for emergency work may be chosen rather than using force account labor. This prediction assumes that the applicant knows a presidentially declared disaster is or will be declared, and that a contractor can respond as quickly as the permanent work force. FEMA expects, however, that an applicant will normally respond to a disaster with all available resources, both private and public, without regard to the eligibility of costs for federal assistance.

(3) *Administrative problems.* The following comments were made on the regulation: Documenting regular-time and overtime separately is burdensome; the correlation between eligible equipment costs and ineligible (straight-time) operator costs is lost (an audit looks at the correlation between labor and equipment); and paying for equipment and not for labor are inconsistent.

The separation of regular and overtime hours need not be burdensome. Since overtime is normally paid at a higher rate, overtime and regular time are routinely separated.

The correlation between equipment costs and ineligible (straight-time) operator costs need not be lost. The straight-time hours of the operator can still be logged to compare with equipment hours, but the straight-time labor costs of the operator will not be eligible costs.

FEMA disagrees that paying for equipment and not for labor are inconsistent. Equipment costs are based on purchase cost, depreciation, operating costs, maintenance costs, salvage values and other factors. The applicant has only a small cost if the equipment sits unused for a week and a much larger cost if the equipment is used during a disaster. In contrast, employees must be paid regardless of how they are employed. FEMA considers equipment use to cause an additional expense to the applicant. Straight-time labor costs are a fixed commitment made by the applicant before the disaster which cause no additional expense.

One comment suggested that mutual aid by other jurisdictions be considered the same as extra hires for eligible work, that is, as an eligible cost. If the mutual aid agreement requires that the applicant pay the salaries of the other jurisdiction's employees providing assistance, FEMA agrees that it serves the same purpose as extra hires and that these are eligible costs. However, if the mutual aid is provided at no additional expense to the applicant, then these costs are not eligible. This is current practice and is unaffected by the proposed rule change.

Another comment proposed that the wages of fill-in workers (both regular and overtime) and the overtime wages of regular employees be eligible costs. The overtime wages of regular employees performing eligible work remain an eligible cost under the regulation. Extra employees hired to perform eligible work represent an incremental disaster-related expense and are an eligible cost. Fill-in workers refer to extra employees hired to perform the duties of regular employees who are performing disaster-related work. Because fill-in workers do not perform disaster-related work, assistance for the cost of their wages is not justified.

Another commentator proposed that only the regular-time wages of emergency and public safety personnel (police and fire) should be ineligible costs. As noted in the previous discussion, the change in regulation is to meet two objectives, that federal assistance only supplement state and local efforts, and that only additional expenses directly caused by the disaster are eligible for assistance. The basis for all regular time wages (for force account labor used for emergency work) being ineligible is that there are no direct additional expenses to the applicant.

Minimum Costs in Damage Survey Report (DSR)

In the proposed rule, FEMA proposed to set a new minimum threshold cost of $1000 for work at a damage site. If the cost of work at a damage site was less than $1000, it would not be eligible for assistance.

Comments Received on the Damage Survey Report and Damage Site Definition

Numerous comments addressed two issues together, a reasonable minimum DSR amount and how a damage site would be defined to which to apply this minimum. Suggested amounts for minimum DSR amounts ranged from $250 to $1000. Several commentators noted that the proposed minimum amount of the DSR has been increased to an amount higher than the rate of inflation.

FEMA acknowledges that this rule will decrease disaster assistance to some applicants. The proportionately large administrative costs of these small amount DSRs, however, justifies an increase in the current minimum DSR amount of $250. There are certain fixed administrative costs for any project such as inspecting, estimating, reviewing, and associated paperwork. For the projects being affected by the proposed change, these administrative costs are a proportionately greater amount than for other projects. If the existing level of $250 remains the same, inflation will cause the fixed administrative costs to

increase to a proportionately greater percentage of the project.

A repeated comment was that DSRs should be written for all sites even if ineligible, consequently savings in administrative costs by raising the minimum DSR amount are minimal. FEMA agrees that a DSR should be written if the issue of the amount of damage or eligibility of the work is likely to arise. The applicant, however, may choose not to show the inspection team damage sites which are clearly ineligible for assistance. The administrative costs from visiting these clearly ineligible damage sites will be avoided.

Several comments conceded that an increase was justified but questioned the amount of the increase, which is greater than inflation. The new minimum DSR amount is not based solely on the inflation rate, but is intended to improve program efficiency and to reduce fixed administrative costs associated with small claims. Most sites with less than $1000 of damage can be repaired during maintenance operations by the applicant. To improve program efficiency, the fixed costs of DSR preparation must be considered in setting a minimum DSR amount. The new minimum DSR amount of $1000 is justified to achieve the objectives of improving program efficiency and focusing resources in areas less likely to be able to be taken care of through normal maintenance procedures.

The other issue raised in conjunction with the minimum threshold cost is the definition of a damage site. The concern is that damage sites will be defined so as to fall below the minimum DSR amount and thus be ineligible for assistance.

A broad range of facilities can be damaged during a disaster from roads and utility systems that are geographically very dispersed to buildings at a specific street address. A definition of a damage site for a road, unless worded generally, will not be applicable to a building. To define damage sites specifically for each type of facility would be needlessly cumbersome. The federal inspectors will be given guidance that damage sites should be defined using engineering judgement and an understanding of the function of the damaged facility. Damage sites shall not be separated with the intent to cause damages to fall below the minimum threshold, and thus be ineligible for assistance.

National Environmental Policy Act

An environmental assessment has been prepared and concludes that this rule will not have a significant impact on the environment and that an Environmental Impact Statement is not required. The assessment is available for review through the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

Regulatory Flexibility Act

The Director certifies that this rule is not a major rule under Executive Order 12291, and will not have a significant impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act, and is not expected (1) to adversely affect the availability of disaster assistance funding to small entities, (2) to have significant secondary or incidental effects on a substantial number of small entities, nor (3) to create any additional burden on small entities. Hence, no regulatory impact analysis has been prepared.

Paperwork Reduction Act

This rule does not involve any collection of information for the purposes of the Paperwork Reduction Act.

Executive Order 12612, Federalism

In promulgating this rule, FEMA has considered the President's Executive Order 12612 on Federalism. This rule makes no changes in the division of governmental responsibilities between the Federal government and the States. Grant administration procedures in accordance with 44 CFR part 13, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, remain the same. No Federalism assessment has been prepared.

Executive Order 12778, Civil Justice Reform

This rule meets the applicable standards of section 2(b)(2) of Executive Order 12778, Civil Justice Reform, dated October 25, 1991, 3 CFR, 1991 Comp., p. 359.

List of Subjects in 44 CFR Part 206

Disaster assistance, Public assistance.

Accordingly, 44 CFR part 206 is amended as follows:

PART 206—[AMENDED]

1. The authority citation for part 206 is revised to read as follows:

Authority: The Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 et seq.; Reorganization Plan No. 3 of 1978, 5 U.S.C. App. 1; E.O. 12148, 3 CFR, 1979 Comp., p. 412; and E.O. 12673, 3 CFR, 1989 Comp., p. 214.

2. Section 206.202 is amended by revising paragraph (d) to read as follows:

§ 206.202 Application Procedures.

* * * * *

(d) *Damage Survey Reports (DSRs).*—(1) Damage surveys are conducted by an inspection team. An authorized local representative accompanies the inspection team and is responsible for representing the applicant and ensuring that all eligible work and costs are identified. The inspectors prepare a Damage Survey Report-Data Sheet (FEMA Form 90–91) for each site. On the Damage Survey Report-Data Sheet the inspectors will identify the eligible scope of work and prepare a quantitative estimate for the eligible work. Any damage that is not shown to the inspection team during its initial visit shall be reported in writing to the Regional Director by the Grantee within 60 days after the initial visit.

(2) When the estimate of work at a damage site is less than $1000, such work is not eligible and a DSR will not be written. This minimum amount for a DSR shall be reviewed periodically by FEMA and adjusted through regulation as necessary.

* * * * *

3. Section 206.228 is amended by adding paragraph (a)(4) as follows:

§ 206.228 Allowable Costs

(a) * * *

(4) *Force Account Labor Costs.* The straight- or regular-time salaries and benefits of a subgrantee's permanently employed personnel are not eligible in calculating the cost of eligible work under sections 403 and 407 of the Stafford Act, 42 U.S.C. 5170b and 5173. For the performance of eligible permanent restoration under section 406 of the Act, 42 U.S.C. 5172, straight-time salaries and benefits of a subgrantee's permanently employed personnel are eligible.

* * * * *

(Catalogue of Federal Domestic Assistance No. 83–516, "Disaster Assistance")

Dated: September 7, 1993.

James L. Witt,

Director.

[FR Doc. 93–22433 Filed 9–13–93; 8:45 am]

BILLING CODE 6718-02-P

---

44 CFR Part 353

Memorandum of Understanding Between Federal Emergency Management Agency and Nuclear Regulatory Commission

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Final rule.

SUMMARY: The Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC) have entered into a new Memorandum of Understanding (MOU) Relating to Radiological Emergency Planning Preparedness, dated June 17, 1993. The text of the MOU is set out in this rule.

EFFECTIVE DATE: June 17, 1993.

FOR FURTHER INFORMATION CONTACT: Vernon L. Wingert, Office of Technological Hazards, State and Local Programs and Support, Federal Emergency Management Agency, 500 C Street, SW., room 617, Washington, DC 20472, (202) 646–2872.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC) have entered into a new Memorandum of Understanding (MOU) Relating to Radiological Emergency Planning Preparedness, dated June 17, 1993. This MOU supersedes a memorandum entered into on November 1, 1980 (published December 16, 1980, 45 FR 82713), revised April 9, 1985 (published April 18, 1985, 50 FR 15485), and published as Appendix A to 44 CFR part 353. The substantive changes in the new MOU are: (1) Self-initiated review by the NRC; (2) Early Site Permit process; (3) adoption of FEMA exercise time-frames; (4) incorporation of FEMA definition of exercise deficiency; (5) NRC commitment to work with licensees in support of State and local governments to correct exercise deficiencies; (6) correlation of FEMA actions on withdrawal of approvals under 44 CFR Part 350 and NRC enforcement actions; and (7) disaster-initiated reviews in situations that affect offsite emergency infrastructures.

Regulatory Flexibility Act

The Director certifies that this interim rule will not have a significant economic impact on a substantial number of small entities in accordance with the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., because the rule will not apply to a substantial number of small entities as defined by the Small Business Size Standards, 13 CFR 121.601, Division E, Major Group 49, as amended 57 FR 62520, December 31, 1992, and is not expected (1) to have significant secondary or incidental effects on a substantial number of small entities, nor (2) to create any additional burden on a substantial number of small entities.

National Environmental Policy Act

The Director has determined under the National Environmental Policy Act of 1969 and FEMA Regulation, 44 CFR part 10, Environmental Considerations, that this rule is not a major Federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not required.

Regulatory Analysis

This interim rule is not a "major rule" as the term is used in Executive Order 12291 and implementing OMB guidance. It will not have an annual effect on the economy of $100 million or more, will not result in a major increase in costs or prices to consumers, individual industries, Federal, State or local agencies or geographic regions and will not have a significant adverse impact on competition, employment, investment, productivity, innovation or the ability of United States based enterprises to compete with foreign based enterprises in domestic or export markets. Therefore, no regulatory analysis is required.

Paper Work Reduction Act

This rule does not contain collection of information requirements and is not subject to the Paper Work Reduction Act of 1980, as amended (44 U.S.C. 3501 et seq.).

Executive Order 12612, Federalism

A Federalism assessment under E.O. 12612 has been prepared and a copy is available for inspection and copying for a fee from the Rules Docket Clerk, above.

List of Subjects in 44 CFR Part 353

Disaster assistance, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reporting and recordkeeping requirements, and Technical assistance.

Accordingly, 44 CFR is amended by revising part 353, as follows:

PART 353—[AMENDED]

1. The authority citation of part 353 is revised to read as follows:

Authority: 31 U.S.C. 9701; E.O. 12657 of November 18, 1988, 3 CFR, 1988 Comp., p. 611, 50 U.S.C. App. § 2251 note; E.O. 12148 of July 20, 1979, 3 CFR, 1979 Comp., p. 412, 50 U.S.C. App. 2251 note.

2. Appendix A to part 353 is revised to read as follows:

APPENDIX A OF PART 354—MEMORANDUM OF UNDERSTANDING BETWEEN FEDERAL EMERGENCY MANAGEMENT AGENCY AND NUCLEAR REGULATORY COMMISSION

The Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC) have entered into a new Memorandum of Understanding (MOU) Relating To Radiological Emergency Planning and Preparedness. This supersedes a memorandum entered into on November 1, 1980 (published December 16, 1980, 45 FR 82713), revised April 9, 1985 (published April 18, 1985, 50 FR 15485), and published as Appendix A to 44 CFR part 353. The substantive changes in the new MOU are: (1) Self-initiated review by the NRC; (2) Early Site Permit process; (3) adoption of FEMA exercise time-frames; (4) incorporation of FEMA definition of exercise deficiency; (5) NRC commitment to work with licensees in support of State and local governments to correct exercise deficiencies; (6) correlation of FEMA actions on withdrawal of approvals under 44 CFR part 350 and NRC enforcement actions; and (7) disaster-initiated reviews in situations that affect offsite emergency infrastructures. The text of the MOU follows.

Memorandum of Understanding Between NRC and FEMA Relating to Radiological Emergency Planning and Preparedness

I. Background and Purposes

This Memorandum of Understanding (MOU) establishes a framework of cooperation between the Federal Emergency Management Agency (FEMA) and the U.S. Nuclear Regulatory Commission (NRC) in radiological emergency response planning matters so that their mutual efforts will be directed toward more effective plans and related preparedness measures at and in the vicinity of nuclear reactors and fuel cycle facilities which are subject to 10 CFR part 50, appendix E, and certain other fuel cycle and materials licensees which have potential for significant accidental offsite radiological releases. The memorandum is responsive to the President's decision of December 7, 1979, that FEMA will take the lead in offsite planning and response, his request that NRC assist FEMA in carrying out this role, and the NRC's continuing statutory responsibility for the radiological health and safety of the public.

On January 14, 1980, the two agencies entered into a "Memorandum of Understanding Between NRC and FEMA to Accomplish a Prompt Improvement in Radiological Emergency Preparedness," that was responsive to the President's December 7, 1979, statement. A revised and updated Memorandum of Understanding became effective November 1, 1980. The MOU was further revised and updated on April 9, 1985. This MOU is a further revision to reflect the evolving relationship between NRC and FEMA and the experience gained in carrying out the provisions of the previous MOU's. This MOU supersedes these two earlier versions of the MOU.

The general principles agreed to in the previous MOU's and reaffirmed in this MOU, are as follows: FEMA coordinates all Federal planning for the offsite impact of radiological emergencies and takes the lead for assessing offsite radiological emergency response plans [1] and preparedness, makes findings and determinations as to the adequacy and capability of implementing offsite plans, and communicates those findings and determinations to the NRC. The NRC reviews those FEMA findings and determinations in conjunction with the NRC onsite findings for the purpose of making determinations on the overall state of emergency preparedness. These overall findings and determinations are used by NRC to make radiological health and safety decisions in the issuance of licenses and the continued operation of licensed plants to include taking enforcement actions as notices of violations, civil penalties, orders, or shutdown of operating reactors. This delineation of responsibilities avoids duplicative efforts by the NRC staff in offsite preparedness matters. However, if FEMA informs the NRC that an emergency, unforeseen contingency, or other reason would prevent FEMA from providing a requested finding in a reasonable time, then, in consultation with FEMA, the NRC might initiate its own review of offsite emergency preparedness.

A separate MOU dated October 22, 1980, deals with NRC/FEMA cooperation and responsibilities in response to an actual or potential radiological emergency. Operations Response Procedures have been developed that implement the provisions of the Incident Response MOU. These documents are intended to be consistent with the Federal Radiological Emergency Response Plan which describes the relationships, roles, and responsibilities of Federal Agencies for responding to accidents involving peacetime nuclear emergencies. On December 1, 1991, the NRC and FEMA also concluded a separate MOU in support of Executive Order 12657 (FEMA Assistance in Emergency Preparedness Planning at Commercial Nuclear Power Plants).

II. Authorities and Responsibilities

FEMA-Executive Order 12148 charges the Director, FEMA, with the responsibility to "* * * establish Federal policies for, and coordinate, all civil defense and civil emergency planning, management, mitigation, and assistance functions of Executive agencies" (Section 2–101) and "* * * represent the President in working with State and local governments and the private sector to stimulate vigorous participation in civil emergency preparedness, mitigation, response, and recovery programs" (Section 2–104.).

On December 7, 1979, the President, in response to the recommendations of the Kemeny Commission on the Accident at Three Mile Island, directed that FEMA assume lead responsibility for all offsite nuclear emergency planning and response.

Specifically, the FEMA responsibilities with respect to radiological emergency preparedness as they relate to NRC are:

1. To take the lead in offsite emergency planning and to review and assess offsite emergency plans and preparedness for adequacy.

2. To make findings and determinations as to whether offsite emergency plans are adequate and can be implemented (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment). Notwithstanding the procedures which are set forth in 44 CFR part 350 for requesting and reaching a FEMA administrative approval of State and local plans, findings, and determinations on the current status of emergency planning and preparedness around particular sites, referred to as interim findings, will be provided by FEMA for use as needed in the NRC licensing process. Such findings will be provided by FEMA on mutually agreed to schedules or on specific NRC request. The request and findings will normally be by written communications between the co-chairs of the NRC/FEMA Steering Committee. An interim finding provided under this arrangement will be an extension of FEMA's procedures for review and approval of offsite radiological emergency plans and preparedness set forth in 44 CFR part 350. It will be based on the review of currently available plans and, if appropriate, joint exercise results related to a specific nuclear power plant site.

If the review involves an application under 10 CFR part 52 for an early site permit, the NRC will forward to FEMA pertinent information provided by the applicant and consult with FEMA as to whether there is any significant impediment to the development of offsite emergency plans. As appropriate, depending upon the nature of information provided by the applicant, the NRC will also request that FEMA determine whether major features of offsite emergency plans submitted by the applicant are acceptable, or whether offsite emergency plans submitted by the applicant are adequate, as discussed below.

An interim finding based only on the review of currently available offsite plans will include an assessment as to whether these plans are adequate when measured against the standards and criteria of NUREG–0654/FEMA–REP–1, and, pending a demonstration through an exercise, whether there is reasonable assurance that the plans can be implemented. The finding will indicate one of the following conditions: (1) Plans are adequate and there is reasonable assurance that they can be implemented with only limited or no corrections needed; (2) plans are adequate, but before a determination can be made as to whether they can be implemented, corrections must be made to the plans or supporting measures must be demonstrated (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment) or (3) plans are inadequate and cannot be implemented until they are revised to correct deficiencies noted in the Federal review.

If, in FEMA's view, the plans that are available are not completed or are not ready for review, FEMA will provide NRC with a status report delineating milestones for preparation of the plan by the offsite authorities as well as FEMA's actions to assist in timely development and review of the plans.

An interim finding on preparedness will be based on review of currently available plans and joint exercise results and will include an assessment as to (1) whether offsite emergency plans are adequate as measured against the standards and criteria of NUREG–0654/

[1] Assessments of offsite plans may be based on State and local government plans submitted to FEMA under its rule (44 CFR Part 350), and as noted in 44 CFR 350.3(f), may also be based on plans currently available to FEMA or furnished to FEMA through the NRC/FEMA Steering Committee.

FEMA–REP–1 and (2) whether the exercise(s) demonstrated that there is reasonable assurance that the plans can be implemented.

An interim finding on preparedness will indicate one of the following conditions: (1) There is reasonable assurance that the plans are adequate and can be implemented as demonstrated in an exercise; (2) there are deficiencies that must be corrected; or (3) FEMA is undecided and will provide a schedule of actions leading to a decision.

3. To assume responsibility, as a supplement to State, local, and utility efforts, for radiological emergency preparedness training of State and local officials.

4. To develop and issue an updated series of interagency assignments which delineate respective agency capabilities and responsibilities and define procedures for coordination and direction for emergency planning and response. [Current assignments are in 44 CFR part 351, March 11, 1982. (47 FR 10758)]

NRC-The Atomic Energy Act of 1954, as amended, requires that the NRC grant licenses only if the health and safety of the public is adequately protected. While the Atomic Energy Act does not specifically require emergency plans and related preparedness measures, the NRC requires consideration of overall emergency preparedness as a part of the licensing process. The NRC rules (10 CFR 50.33, 50.34, 50.47, 50.54, and appendix E to 10 CFR part 50, and 10 CFR part 52) include requirements for the licensee's emergency plans.

Specifically, the NRC responsibilities for radiological emergency preparedness are:

1. To assess licensee emergency plans for adequacy. This review will include organizations with whom licensees have written agreements to provide onsite support services under emergency conditions.

2. To verify that licensee emergency plans are adequately implemented (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment).

3. To review the FEMA findings and determinations as to whether offsite plans are adequate and can be implemented.

4. To make radiological health and safety decisions with regard to the overall state of emergency preparedness (i.e., integration of emergency preparedness onsite as determined by the NRC and offsite as determined by FEMA and reviewed by NRC) such as assurance for continued operation, for issuance of operating licenses, or for taking enforcement actions, such as notices of violations, civil penalties, orders, or shutdown of operating reactors.

III. Areas of Cooperation

A. NRC Licensing Reviews

FEMA will provide support to the NRC for licensing reviews related to reactors, fuel facilities, and materials licensees with regard to the assessment of the adequacy of offsite radiological emergency response plans and preparedness. This will include timely submittal of an evaluation suitable for inclusion in NRC safety evaluation reports.

Substantially prior to the time that a FEMA evaluation is required with regard to fuel facility or materials license review, NRC will identify those fuel and materials licensees with potential for significant accidental offsite radiological releases and transmit a request for review to FEMA as the emergency plans are completed.

FEMA routine support will include providing assessments, findings and determinations (interim and final) on offsite plans and preparedness related to reactor license reviews. To support its findings and determinations, FEMA will make expert witnesses available before the Commission, the NRC Advisory Committee on Reactor Safeguards, NRC hearing boards and administrative law judges, for any court actions, and during any related discovery proceedings.

FEMA will appear in NRC licensing proceedings as part of the presentation of the NRC staff. FEMA counsel will normally present FEMA witnesses and be permitted, at the discretion of the NRC licensing board, to cross-examine the witnesses of parties, other than the NRC witnesses, on matters involving FEMA findings and determinations, policies, or operations; however, FEMA will not be asked to testify on status reports. FEMA is not a party to NRC proceedings and, therefore, is not subject to formal discovery requirements placed upon parties to NRC proceedings. Consistent with available resources, however, FEMA will respond informally to discovery requests by parties. Specific assignment of professional responsibilities between NRC and FEMA counsel will be primarily the responsibility of the attorneys assigned to a particular case. In situations where questions of professional responsibility cannot be resolved by the attorneys assigned, resolution of any differences will be made by the General Counsel of FEMA and the General Counsel of the NRC or their designees. NRC will request the presiding Board to place FEMA on the service list for all litigation in which it is expected to participate.

Nothing in this MOU shall be construed in any way to diminish NRC's responsibility for protecting the radiological health and safety of the public.

B. FEMA Review of Offsite Plans and Preparedness

NRC will assist in the development and review of offsite plans and preparedness through its membership on the Regional Assistance Committees (RAC). FEMA will chair the Regional Assistance Committees. Consistent with NRC's statutory responsibility, NRC will recognize FEMA as the interface with State and local governments for interpreting offsite radiological emergency planning and preparedness criteria as they affect those governments and for reporting to those governments the results of any evaluation of their radiological emergency plans and preparedness.

Where questions arise concerning the interpretation of the criteria, such questions will continue to be referred to FEMA Headquarters, and when appropriate, to the NRC/FEMA Steering Committee to assure uniform interpretation.

C. Preparation for and Evaluation of Joint Exercises

FEMA and NRC will cooperate in determining exercise requirements for licensees, and State and local governments. They will also jointly observe and evaluate exercises. NRC and FEMA will institute procedures to enhance the review of objectives and scenarios for joint exercises. This review is to assure that both the onsite considerations of NRC and the offsite considerations of FEMA are adequately addressed and integrated in a manner that will provide for a technically sound exercise upon which an assessment of preparedness capabilities can be based. The NRC/FEMA procedures will provide for the availability of exercise objectives and scenarios sufficiently in advance of scheduled exercises to allow enough time for adequate review by NRC and FEMA and correction of any deficiencies by the licensee. The failure of a licensee to develop a scenario that adequately addresses both onsite and offsite considerations may result in NRC taking enforcement actions.

The FEMA reports will be a part of an interim finding on emergency preparedness; or will be the result of an exercise conducted pursuant to FEMA's review and approval procedures under

44 CFR part 350 and NRC's requirement under 10 CFR part 50, appendix E, Section IV.F. Exercise evaluations will identify one of the following conditions: (1) There is reasonable assurance that the plans are adequate and can be implemented as demonstrated in the exercise; (2) there are deficiencies that must be corrected; or (3) FEMA is undecided and will provide a schedule of actions leading to a decision. The schedule for issuance of the draft and final exercise reports will be as shown in FEMA-REP–14 (Radiological Emergency Preparedness Exercise Manual).

The deficiency referred to in (2) above is defined as an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant. Because of the potential impact of deficiencies on emergency preparedness, they should be corrected within 120 days through appropriate remedial actions, including remedial exercises, drills, or other actions.

Where there are deficiencies of the types noted above, and when there is a potential for remedial actions, FEMA Headquarters will promptly (1–2 days) discuss these with NRC Headquarters. Within 10 days of the exercise, official notification of identified deficiencies will be made by FEMA to the State, NRC Headquarters, and the RAC with an information copy to the licensee. NRC will formally notify the licensee of the deficiencies and monitor the licensee's efforts to work with State and local authorities to correct the deficiencies. Approximately 60 days after official notification of the deficiency, the NRC, in consultation with FEMA, will assess the progress being made toward resolution of the deficiencies.

D. Withdrawal of Reasonable Assurance Finding

If FEMA determines under 44 CFR 350.13 of its regulations that offsite emergency plans or preparedness are not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of radiological emergency to protect the health and safety of the public, FEMA shall, as described in its rule, withdraw approval.

Upon receiving notification of such action from FEMA, the NRC will promptly review FEMA's findings and determinations and formally document the NRC's position. When, as described in 10 CFR 50.54(s)(2)(ii) and 50.54(s)(3) of its regulations, the NRC finds the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the NRC will notify the affected licensee accordingly and start the "120-day clock."[2]

E. Emergency Planning and Preparedness Guidance

NRC has lead responsibility for the development of emergency planning and preparedness guidance for licensees. FEMA has lead responsibility for the development of radiological emergency planning and preparedness guidance for State and local agencies. NRC and FEMA recognize the need for an integrated, coordinated approach to radiological emergency planning and preparedness by NRC licensees and State and local governments. NRC and FEMA will each, therefore, provide opportunity for the other agency to review and comment on such guidance (including interpretations of agreed joint guidance) prior to adoption as formal agency guidance.

F. Support for Document Management System

FEMA and NRC will each provide the other with continued access to those automatic data processing support systems which contain relevant emergency preparedness data.

G. Ongoing NRC Research and Development Programs

Ongoing NRC and FEMA research and development programs that are related to State and local radiological emergency planning and preparedness will be coordinated. NRC and FEMA will each provide opportunity for the other agency to review and comment on relevant research and development programs prior to implementing them.

H. Public Information and Education Programs

FEMA will take the lead in developing public information and educational programs. NRC will assist FEMA by reviewing for accuracy educational materials concerning radiation, and its hazards and information regarding appropriate actions to be taken by the general public in the event of an accident involving radioactive materials.

I. Recovery from Disasters Affecting Offsite Emergency Preparedness

Disasters that destroy roads, buildings, communications, transportation resources or other offsite infrastructure in the vicinity of a nuclear power plant can degrade the capabilities of offsite response organizations in the 10-mile plume emergency planning zone. Examples of events that could cause such devastation are hurricanes, tornadoes, earthquakes, tsunamis, volcanic eruptions, major fires, large explosions, and riots.

If a disaster damages the area around a licensed operating nuclear power plant to an extent that FEMA seriously questions the continued adequacy of offsite emergency preparedness, FEMA will inform the NRC promptly. Likewise, the NRC will inform FEMA promptly of any information it receives from licensees, its inspectors, or others, that raises serious questions about the continued adequacy of offsite emergency preparedness. If FEMA concludes that a disaster-initiated review of offsite radiological emergency preparedness is necessary to determine if offsite emergency preparedness is still adequate, it will inform the NRC in writing, as soon as practicable, including a schedule for conduct of the review. FEMA will also give the NRC (1) interim written reports of its findings, as appropriate, and (2) a final written report on the results of its review.

The disaster-initiated review is performed to reaffirm the radiological emergency preparedness capabilities of affected offsite jurisdictions located in the 10-mile emergency planning zone and is not intended to be a comprehensive review of offsite plans and preparedness.

The NRC will consider information provided by FEMA Headquarters and pertinent findings from FEMA's disaster-initiated review in making decisions regarding the restart or continued operation of an affected operating nuclear power reactor. The NRC will notify FEMA Headquarters, in writing, of the schedule for restart of an affected reactor and keep FEMA Headquarters informed of changes in that schedule.

IV. NRC/FEMA Steering Committee

The NRC/FEMA Steering Committee on Emergency Preparedness will continue to be the focal point for

[2] Per 10 CFR 50.54(s)(2)(ii), the Commission will determine whether the reactor shall be shut down or other appropriate enforcement actions if such conditions are not corrected within four months. The NRC is not limited by this provision of the rule, for, as stated in 10 CFR 50.54(s)(3), "Nothing in this paragraph shall be construed as limiting the authority of the Commission to take action under any other regulation or authority of the Commission *or at any time other than that specified in this paragraph*" (emphasis added).

coordination of emergency planning and preparedness. As discussed in Section I of this agreement, response activities between these two agencies are addressed in a separate MOU. The Steering Committee will consist of an equal number of members to represent each agency with one vote per agency. When the Steering Committee cannot agree on the resolution of an issue, the issue will be referred to NRC and FEMA management. The NRC members will have lead responsibility for licensee planning and preparedness and the FEMA members will have lead responsibility for offsite planning and preparedness. The Steering Committee will assure coordination of plans and preparedness evaluation activities and revise, as necessary, acceptance criteria for licensee, State and local radiological emergency planning and preparedness. NRC and FEMA will then consider and adopt criteria, as appropriate, in their respective jurisdictions. (See Attachment 1).

V. Working Arrangements

A. The normal point of contact for implementation of the points in this MOU will be the NRC/FEMA Steering Committee.

B. The Steering Committee will establish the day-to-day procedures for assuring that the arrangements of this MOU are carried out.

VI. Memorandum of Understanding

A. This MOU shall be effective as of date of signature and shall continue in effect unless terminated by either party upon 30 days notice in writing.

B. Amendments or modifications to this MOU may be made upon written agreement by both parties.

Approved for the U.S. Nuclear Regulatory Commission.

Dated: June 17, 1993.

James M. Taylor,

Executive Director for Operations.

Dated: June 17, 1993.

Approved for the Federal Emergency Management Agency.

Richard W. Krimm,

Acting Associate Director, State and Local Programs and Support.

Attachment 1—FEMA/NRC Steering Committee

Purpose

Assure coordination of efforts to maintain and improve emergency planning and preparedness for nuclear power reactors as described in the NRC and FEMA rules and the NRC/FEMA MOU on Radiological Emergency Planning and Preparedness. Coordinate consistent criteria for licensee, State and local emergency plans and preparedness.

Membership

The NRC and FEMA consignees of this MOU will designate respective co-chairs for the Steering Committee. The designated co-chairs will, in turn, appoint their respective members to the Committee.

Membership Changes

Changes to the membership of the NRC/FEMA Steering Committee may be made by the co-chairs representing the agency whose member is being changed.

Operating Procedures

The Steering Committee will maintain a record of each meeting to include identification of issues discussed and conclusions reached. No meeting will be held without the attendance and participation of at least the co-chairs or two assigned members of each agency.

Coordination

When items involving responsibilities of other NRC or FEMA offices are discussed, the affected offices will be contacted as appropriate.

Dated: September 7, 1993.

James L. Witt,

Director.

[FR Doc. 93–22431 Filed 9–13–93; 8:45 am]

BILLING CODE 6718–01–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 661

[Docket No. 930402–3134; I.D. 090293A]

Ocean Salmon Fisheries Off the Coasts of Washington, Oregon, and California

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Inseason adjustments.

SUMMARY: NMFS announces that the quotas for the commercial fishery in the subarea from the Queets River, Washington, to Cape Falcon, Oregon, which began on August 27, 1993, are increased to 5,800 chinook salmon and 26,300 coho salmon to account for fish not harvested by earlier commercial fisheries north of Cape Falcon. The commercial fishery from the Queets River, Washington, to Cape Falcon, Oregon, will reopen for 4 days on September 1–4, 1993, with a possession and landing limit of 70 coho salmon for the open period, followed by a 4-day closure on September 5–8, 1993. These adjustments are intended to provide additional fishing opportunity to catch the available fish and minimize disruption to the commercial fishery without exceeding the ocean share allocated to the commercial fishery in this subarea.

DATES: Effective at 0001 hours local time, September 1, 1993, through 2400 hours local time, September 8, 1993. Comments will be accepted through September 28, 1993.

ADDRESSES: Comments may be mailed to Rolland A. Schmitten, Director, Northwest Region, National Marine Fisheries Service, NOAA, 7600 Sand Point Way NE., BIN C15700–Bldg. 1, Seattle, WA 98115–0070. Information relevant to this notice has been compiled in aggregate form and is available for public review during business hours at the office of the NMFS Northwest Regional Director.

FOR FURTHER INFORMATION CONTACT: William L. Robinson at (206) 526–6140.

SUPPLEMENTARY INFORMATION: In its amended emergency interim rule (58 FR 31664, June 4, 1993), NMFS announced that "All non-Indian troll and recreational ocean fisheries will be limited by either (a) an overall 60,000 chinook quota or (b) impacts on critical Washington coastal and Puget Sound natural coho stocks equivalent to the preseason coho quota of 250,000 (including hooking mortality associated with the May/June chinook fisheries). The initial troll allocation provides for a harvest of no more than 30,000 chinook and 62,500 coho. However, a preseason species trade with the recreational fishery of 15,000 coho for 5,000 chinook results in the troll fishery being limited by overall quotas of 35,000 chinook and 47,500 coho."

The commercial fishery North of Cape Falcon was subject to chinook and coho quotas in three seasons set forth in the emergency interim rule. Based on the best available information on August 30, the commercial fishery catch north of Cape Falcon, Oregon, resulted in 17,300 coho salmon and 4,900 chinook salmon remaining in the harvest guidelines following the previous season closure on August 6 of the commercial fishery for all salmon species between the U.S.-Canada border and Cape Falcon. The emergency interim rule states that "Any transfers between subarea quotas of 5,000 fish or less shall be done on a fish-for-fish basis." Unlike the first two seasons this third season opening is within a subarea and therefore the chinook salmon quota for the commercial fishery beginning August 27 between the Queets River and Cape Falcon has been increased by the 4,900 remaining fish, from 900 to 5,800 fish. To maintain impacts at preseason levels on critical Queets River natural coho

salmon stocks, the coho salmon quota for this same fishery has been increased by 13,000 fish, from 13,300 to 26,300 fish.

Under the preseason regulations, the 1993 commercial fishery between the Queets River, Washington, and Cape Falcon, Oregon, was scheduled to open August 27 and continue through the earliest of October 31 or attainment of subarea quotas of either 13,300 coho salmon or 900 chinook salmon. Preseason restrictions included a cycle of 2 days open and 3 days closed and a possession and landing limit of 35 coho salmon per opening.

The best available information on August 30 indicated that commercial catches during the first open period on August 27–28 in the subarea from the Queets River to Cape Falcon totaled about 2,700 coho salmon and 570 chinook salmon. To provide commercial fishermen additional opportunity to catch the available fish, the fishery in this subarea will reopen for 4 days, effective 0001 hours local time, September 1 through 2400 hours local time, September 4. Furthermore, each vessel may possess, land and deliver not more than 70 coho salmon for this open period. Following this 4-day open period, the commercial fishery in this subarea will close for 4 days, September 5–8. During this closed period, catches will be evaluated to determine if sufficient fish remain to reopen this fishery.

Modifications of quotas, fishing seasons, and limited retention regulations are authorized by regulations at 50 CFR 661.21(b)(1) (i) and (ii). All other restrictions that apply to this fishery remain in effect as announced in the amended emergency interim rule (58 FR 31664).

The Regional Director consulted with representatives of the Pacific Fishery Management Council, the Washington Department of Fisheries, and the Oregon Department of Fish and Wildlife, regarding these adjustments affecting the commercial fishery between the Queets River and Cape Falcon. The states of Washington and Oregon will manage the commercial fishery in state waters adjacent to this area of the EEZ in accordance with this Federal action. In accordance with the inseason notice procedures of 50 CFR 661.23, actual notice to fishermen of this action was given prior to 0001 hours local time, September 1, 1993, by telephone hotline number (206) 526–6667 or (800) 662–9825 and by U.S. Coast Guard Notice to Mariners broadcasts on Channel 16 VHF–FM and 2182 Khz. Because of the need for immediate action, the Secretary of Commerce has determined that good cause exists for this notice to be issued without affording a prior opportunity for public comment. This notice does not apply to treaty Indian fisheries or to other fisheries that may be operating in other areas.

Classification

This action is authorized by 50 CFR 661.21 and 661.23 and is in compliance with Executive Order 12291.

List of Subjects in 50 CFR Part 661

Fisheries, Fishing, Indians, Reporting and recordkeeping requirements.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: September 8, 1993.

David S. Crestin,

Acting Director, Office of Fisheries Conservation and Management, National Marine Fisheries Service.

[FR Doc. 93–22376 Filed 9–13–93; 8:45 am]

BILLING CODE 3510–33–M

Proposed Rules

Federal Register
Vol. 58, No. 176
Tuesday, September 14, 1993

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

9 CFR Part 92

[Docket No. 93–073–1]

Quarantine Fee for Horses, Ruminants, and Swine

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Proposed rule.

SUMMARY: We are proposing to require importers of horses, ruminants, and swine wishing to use a U.S. Department of Agriculture quarantine facility to pay a reservation fee covering 100 percent of the estimated cost of care, feed, and handling of the animals. This proposal is intended to protect the Department from financial losses in the event an importer places animals in quarantine and then fails to pay outstanding bills.

DATES: Consideration will be given only to comments received on or before October 14, 1993.

ADDRESSES: Please send an original and three copies of your comments to Chief, Regulatory Analysis and Development, PPD, APHIS, USDA, room 804, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782. Please state that your comments refer to Docket No. 93–073–1. Comments received may be inspected at USDA, room 1141, South Building, 14th Street and Independence Avenue SW., Washington, DC, between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. Persons wishing to inspect comments are encouraged to call ahead on (202) 690–2817 to facilitate entry into the comment reading room.

FOR FURTHER INFORMATION CONTACT: Dr. Samuel Richeson, Senior Staff Veterinarian, Import-Export Animals Staff, VS, APHIS, USDA, room 764, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782 (301) 436–8170.

SUPPLEMENTARY INFORMATION:

Background

The animal import regulations contained in 9 CFR part 92 (referred to below as the regulations) govern the importation of certain animals into the United States, and require certain animals to be quarantined in the United States as part of their importation. The regulations in §§ 92.304, 92.404, and 92.504 require importers to pay a reservation fee covering 25 percent of the estimated cost of care, feed, and handling of horses, ruminants, and swine, respectively, to be quarantined in U.S. Department of Agriculture (USDA) facilities. Based on our experience conducting quarantines at USDA facilities, we have discovered that requiring only a partial payment of estimated costs prior to quarantine leaves USDA vulnerable to significant financial losses in the event importers abandon their animals in quarantine facilities.

The regulations in §§ 92.103 and 92.204 address this concern by requiring that importers wishing to use USDA facilities for the quarantine of birds and poultry, respectively, pay a reservation fee covering 100 percent of estimated quarantine costs. This requirement better protects USDA from incurring quarantine expenses that could be difficult or impossible to recover.

We propose to provide USDA with similar protection against financial losses incurred from the uncompensated quarantine of imported horses, ruminants, and swine by amending §§ 92.304(a)(3)(i), 92.404(a)(4)(i), and 92.504(a)(4)(i) to require that importers pay a reservation fee covering 100 percent of estimated quarantine costs.

Executive Order 12291 and Regulatory Flexibility Act

We are issuing this proposed rule in conformance with Executive Order 12291, and we have determined that it is not a "major rule." Based on information compiled by the Department, we have determined that this proposed rule would have an effect on the economy of less than $100 million; would not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; and would not cause a significant adverse effect on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Requiring horse, ruminant, and swine importers to pay reservation fees covering 100 percent of estimated quarantine costs would have no significant economic consequences. Importers would pay the same fees as previously required, only sooner.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action would not have a significant economic impact on a substantial number of small entities.

Executive Order 12778

This proposed rule has been reviewed under Executive Order 12778, Civil Justice Reform. If this proposed rule is adopted: (1) All State and local laws and regulations that are inconsistent with this rule will be preempted; (2) no retroactive effect will be given to this rule; and (3) administrative proceedings will not be required before parties may file suit in court challenging this rule.

Paperwork Reduction Act

This proposed rule contains no information collection or recordkeeping requirements under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 92 CFR Part 92

Animal diseases, Imports, Livestock, Poultry and poultry products, Quarantine, Reporting and recordkeeping requirements.

Accordingly, 9 CFR part 92 is amended as follows:

PART 92—IMPORTATION OF CERTAIN ANIMALS AND POULTRY AND CERTAIN ANIMAL AND POULTRY PRODUCTS; INSPECTION AND OTHER REQUIREMENTS FOR CERTAIN MEANS OF CONVEYANCE AND SHIPPING CONTAINERS THEREON

1. The authority citation for part 92 would continue to read as follows:

Authority: 7 U.S.C. 1622; 19 U.S.C. 1306; 21 U.S.C. 102–105, 111, 114a, 134a, 134b, 134c, 134d, 134f, 135, 136, and 136a; 31 U.S.C. 9701; 7 CFR 2.17, 2.51, and 371.2(d).

§ 92.304 [Amended]

2. In § 92.304, paragraph (a)(3)(i), the second sentence would be amended by

removing "25" and adding "100" in its place; and the third sentence would be removed.

§ 92.404 [Amended]

3. In § 92.404, paragraph (a)(4)(i), the second sentence would be amended by removing "25" and adding "100" in its place; and the third sentence would be removed.

§ 92.504 [Amended]

4. In § 92.504, paragraph (a)(4)(i), the second sentence would be amended by removing "25" and adding "100" in its place; and the third sentence would be removed.

Done in Washington, DC, this 3rd day of September.

Patricia A. Jensen,

Deputy Assistant Secretary, Marketing and Inspection Services.

[FR Doc. 93–22423 Filed 9–13–93; 8:45 am]

BILLING CODE 3410-34-P

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2 and 72

RIN 3150–AE54

Interim Storage of Spent Fuel in an Independent Spent Fuel Storage Installation; Site-Specific License to a Qualified Applicant

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule; Extension of public comment period.

SUMMARY: On June 3, 1993 (58 FR 31478), the Nuclear Regulatory Commission (NRC) published for public comment a proposed rule to amend its procedures under which the Director of Nuclear Materials Safety and Safeguards can issue a site-specific license to a qualified applicant for the interim storage of spent fuel in an independent spent fuel storage installation (ISFSI) following satisfactory completion of NRC safety and environmental reviews and after any public hearing on the application. The comment period for this proposed rule was to have expired on August 17, 1993.

The Commission received a joint request from three organizations, requesting the Commission to extend the public comment period. The joint request states in pertinent part that "[t]he proposed rule appears to make the opportunity for site-specific analysis and judicial review more remote than it now is. We and several organizations concerned about the trend toward long-term dry storage at reactors would like the opportunity to obtain a greater understanding of the proposed rule and its implications."

The Commission's intention underlying the proposed rule, as explained in the notice of proposed rulemaking, is to make procedural changes that are essentially administrative in nature; the proposed changes would not affect the scope of NRC site-specific reviews or change current public hearing opportunities. Therefore, it would be of particular interest for NRC to understand fully the basis for public comments that appear to suggest (as indicated by the above-quoted comment) the proposed rule would actually do the contrary. Accordingly, the Commission finds that it is reasonable to extend the public comment period 45 days to October 1, 1993, in order to allow all interested persons adequate time fully to provide their views.

DATES: The comment period has been extended and now expires October 1, 1993. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received on or before this date.

ADDRESSES: Submit comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC. 20555. ATTN: Docketing and Services Branch.

Hand deliver comments to: 11555 Rockville Pike, Rockville, Maryland between 7:45 a.m. and 4:15 p.m. Federal workdays.

Copies of comments may be examined at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC in the lower level of the Gelman Building.

FOR FURTHER INFORMATION CONTACT: C. William Reamer, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Telephone: (301) 504–1640.

Dated at Rockville, Maryland, this 8th day of September, 1993.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 93–22389 Filed 9–13–93; 8:45 am]

BILLING CODE 7590-01-P

10 CFR Part 72

RIN 3150–AE37

Notification of Events at Independent Spent Fuel Storage Installations and the Monitored Retrievable Storage Installation

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) proposes to amend its regulations to revise licensee reporting requirements regarding the notification of events related to radiation safety at Independent Spent Fuel Storage Installations (ISFSIs) and a Monitored Retrievable Storage Installation (MRS). This action will ensure that significant occurrences at these licensed facilities are promptly reported to NRC so that the Commission can evaluate whether the licensee has taken appropriate actions to protect the public health and safety and whether prompt NRC action is necessary to address generic safety concerns.

DATES: The comment period expires November 29, 1993. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

ADDRESSES: Mail written comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC, 20555, Attention: Docketing and Service Branch. Comments may be delivered to One White Flint North, 11555 Rockville Pike, Rockville, MD, 20852, between 7:45 am and 4:15 pm on Federal workdays.

Copies of the draft regulatory analysis, the finding of no significant impact, the supporting statement submitted to OMB, and comments received may be examined at: The NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Naiem S. Tanious, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC, 20555. Telephone (301) 492–3878.

SUPPLEMENTARY INFORMATION:

Background

On August 16, 1991 (56 FR 40757), the NRC amended its regulations in Title 10, Code of Federal Regulations (10 CFR), parts 20, 30, 40, and 70 to better describe those events that must be reported to the NRC because they pose a hazard to public health and safety or the environment. These new reporting requirements covered the following areas: Inability to control licensed material, unplanned contamination events, failure of safety equipment, personal injury events, and fires and explosions.

Public comments received when the amendments were proposed suggested that part 72 also be amended to require notification of events at ISFSIs and the

MRS. The NRC responded that it would consider the suggestion and initiate rulemaking to amend part 72, if appropriate. In considering the suggestion, the NRC reviewed the event reporting requirements imposed on part 72 licensees and found that, except for criticality, part 72 itself contains no reporting requirements for the types of events covered by the recent amendments to parts 30, 40, and 70. Furthermore, among the six existing part 72 licensees, the reporting requirements (imposed by license conditions) were not consistent. Therefore, the NRC has now decided that it is desirable to proceed with amending part 72.

Discussion

The event reporting requirements which are the subject of this proposed rulemaking are similar to those added to parts 30, 40, and 70. The NRC believes that the proposed requirements more accurately describe events that must be reported to the NRC because they affect the health and safety of the public and the environment.

The intent of event reporting requirements is to require timely notification (either immediately or within 24 hours, depending on severity) to the NRC of events that could require prompt action by the NRC to protect public health and safety or the environment. Events that may require notification include personal injuries, fires, explosions, toxic gas releases, tornados, etc. Prompt NRC actions may include evaluating the potential hazards and corrective actions being taken by the licensee, issuing immediate warnings of generic hazards to other licensees, communicating with other Federal and State organizations, activating the NRC incident response center, or dispatching a response team to the site of the event.

With one exception (i.e., GE Morris), ISFSIs currently licensed under Part 72 are located at commercial power reactor sites, and those reactor licensees are already subject to event reporting requirements under 10 CFR 50.72 as well as, in some cases, under part 72 license conditions. The proposed amendments would therefore achieve consistent event reporting requirements for ISFSIs and an MRS with very little practical impact on current part 72 licensees.

To avoid conflicts, the proposed amendments do not apply to licensee events subject to the reporting requirements in 10 CFR § 50.72 by virtue of license conditions included in their part 72 licenses. However, these amendments would otherwise apply to commercial power reactor licensees for activities licensed under part 72; the amendments also apply to research and test reactor licensees possessing material licensed under part 72 who are not subject to the notification requirements in § 50.72. For simplicity, a nuclear power plant licensee who holds both part 50 and part 72 licenses may use reporting requirements from part 50 for reporting events from both the reactor and the ISFSI. Furthermore, the licensee would not necessarily make any changes to comply with the requirements of this rule if the reporting requirements in the technical specifications for ISFSI would be at least as stringent as the reporting requirements proposed for part 72.

If, as NRC now intends, this proposed rule becomes final, conforming license amendments may be issued by the NRC to resolve any remaining conflicts between the newly promulgated rule and existing license conditions. If conforming license amendments are required, the NRC intends to issue these amendments on its own initiative without a formal submittal from the licensee requesting the amendments.

The NRC specifically requests public comments on (1) the completeness of these reporting requirements, (2) the number of reports that licensees expect might be generated yearly, (3) how to minimize reports of events that do not require a prompt NRC response without excluding any events that do require prompt NRC actions, and (4) events that would require prompt NRC actions but are not covered under the proposed amendments.

For purposes of Section 223 of the Atomic Energy Act of 1954, as amended, concerning violations under circumstances set forth in that section, the amendments are proposed for issuance under Sections 161b, 161i, or 161o of the Act.

A. Immediate Notification

A period of 4 hours would be the maximum time allowed for "immediate notification" by part 72 licensees. It is intended that licensees will notify the NRC of events requiring immediate notification, as described below, as soon as possible, but in no case later than four hours after discovery of the event. The proposed "immediate notification" requirements are consistent with the immediate notification requirements specified in § 50.72 for power reactors.

Control of Spent Fuel or High-Level Radioactive Waste

The primary responsibility for controlling spent nuclear fuel (as defined in 10 CFR 72.3, spent fuel includes the special nuclear material, byproduct material, source material, and other radioactive materials associated with fuel assemblies), or high-level radioactive waste (HLW), rests with the licensee. It is important that the NRC immediately receive reports of events that prevent the licensee from performing immediate actions necessary to maintain control of spent fuel or HLW and from protecting the public. Licensees will need to exercise some judgment in determining when events require immediate NRC notification. After an event has been discovered, the licensee must determine what immediate actions are necessary to: (1) Maintain and verify control of all spent fuel or HLW involved and (2) avoid exposures to radiation or radioactive materials that could exceed regulatory limits, or to releases of spent fuel and HLW that could exceed regulatory limits. Events may include fires, explosions, toxic gas releases, natural phenomena that can cause damage such as tornados and earthquakes, etc. An immediate NRC notification would be required if the event prevented the licensee from performing any of those actions, regardless of the duration of the event.

The NRC expects licensees to report as soon as possible any event where personnel normally able to take an immediate action are somehow prevented from taking the action. An immediate action is an initial action taken after a hazardous situation is identified to minimize exposures to radiation or radioactive materials, or to minimize releases of radioactive materials. Immediate actions would normally be taken within 15 minutes of identifying the hazard. The NRC does not expect immediate reports of normal delays associated with sounding alarms and responding to the site of the emergency. However, if alarms cannot be sounded or personnel cannot respond, an immediate report (within 4 hours) would be required. A normal delay in responding to an event such as the time to drive to the site or the time to call the fire department would not be reportable. However, once responders are available and able to do the job, any additional delay would be reportable.

Examples of cases where an immediate report would be required include: A toxic gas leak near an operation that prevents workers from immediately reducing a high radiation field around the leak; a fire that prevents workers from immediately securing a ventilation system to stop a release of airborne radioactive material exceeding regulatory limits; and a collapsed ceiling from an explosion that

prevents workers from immediately closing a valve to stop a release of radioactive material exceeding regulatory limits.

Power Reactors Using Storage Casks

Pursuant to § 72.216(c), as proposed, reporting requirements would be added by this proposed rule in § 72.75 (a)(2) and (a)(3) to cover power reactors licensed under part 50 who are also using fuel storage casks under a general license issued under § 72.210 (Subpart K—General License for Storage of Spent Fuel at Power Reactor Sites). These ISFSI general licensees are required by § 72.216 and § 50.72(b)(2)(vii) to report immediately, but not later than 4 hours, any defect in a spent fuel storage cask structure, system, or component which is important to safety, or a significant reduction in the effectiveness of any spent fuel storage cask confinement system. Adding these requirements to the new section 72.75 will establish consistent reporting requirements among all licensees using spent fuel storage casks.

A reporting requirement is being proposed in § 72.75(a)(4) to cover immediate actions needed to protect the public health and safety taken in an emergency that depart from a license condition or a technical specification. (To combat a fire, for example the licensee may take measures that are not normally allowed by the license.) This proposed requirement is based on existing requirements in parts 50.72(b)(1)(i)(B) and 50.54(x). Adding this reporting requirement to § 72.75 will ensure that such reports will still be required if the part 50 license is terminated and the ISFSI continues operation under a specific part 72 license.

Personal Injury Events

A requirement would be added for licensees to report as soon as possible but not later than 4 hours after discovering any event that requires unplanned medical treatment at a medical facility of an individual with radioactive contamination on the individual's clothing or body which could cause further contamination. These events are significant because they may (1) indicate physical safety problems in a licensed operation, (2) risk internal contamination through open wounds, and (3) expose medical personnel to radiation and contamination.

This information is necessary to provide the basis for an independent determination by the NRC that appropriate actions have been taken both to control the spread of contamination and to perform any necessary decontamination. Prompt action may also be required to investigate the cause of the injury and to prevent additional contamination problems. If within 4 hours of discovering the personal injury event the licensee has not verified whether the individual receiving medical treatment was contaminated, the licensee is expected to act conservatively and report the event.

The requirement to report personal injury events is being proposed as an immediate report rather than the 24 hours reporting requirement established in parts 30, 40, and 70 to make the proposed requirement consistent with § 50.72(b)(2)(v) which requires a 4 hour report from power reactors. As stated earlier, most facilities licensed under part 72 are located at power reactor sites, and event reporting has been incorporated into the administrative procedures for the power reactors. As a result, those part 72 facilities would already report personal injury events within 4 hours. The NRC is proposing to make this consistent with part 50 because most part 72 facilities are so closely associated with power reactors. As for research and test reactors, which will be covered by this proposed rule, there are no licenses issued under part 72 to these nonpower reactors for independent storage of their spent fuel. The NRC believes that the impact of this requirement on part 72 facilities which are not located at power reactor sites (i.e., GE Morris) will be minimal.

Fires and Explosions

A new requirement would be added to report as soon as possible but not later than 4 hours after discovering any fire or explosion that damages spent fuel or HLW, or any device, container, or equipment that contains spent fuel or HLW. These events must be evaluated promptly to minimize any spread of contamination and to determine the performance of shielding and other features designed to control spent fuel or HLW. Fires or explosions that damage spent fuel or HLW are of particular significance because they can cause radioactive materials to be released, generate airborne radioactive contamination, and generate contaminated runoff from water used to extinguish fires. A second notification is not required if an immediate notification was made for a fire or explosion that prevented immediate response actions (see the discussion above for control of spent fuel or HLW).

This information is necessary to assure the NRC that appropriate actions have been taken to detect and control any releases that may have occurred. Prompt action may be required to verify survey results and radiological controls for recovery efforts. In the event of a fire or explosion, an immediate report would be required if licensee personnel or firefighters were prevented by radiation hazards or other conditions from performing immediate response actions that they would normally be able to perform. However, if no immediate response actions were prevented, but there was damage that affected the integrity of the spent fuel or HLW or its container, an immediate report would still be required. If within 4 hours of discovering the fire or explosion the licensee has not verified whether any reportable damage occurred, the licensee is expected to act conservatively and report the event.

B. 24-Hour Notification

Contamination Events

The proposed rule would require licensees to notify the NRC within 24 hours of discovering any unplanned contamination event that requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours through the imposition of additional radiological controls or prohibiting entry into the area. If a licensee discovers that an area has unexpectedly been contaminated with a licensed material, the NRC expects the licensee to impose appropriate controls to keep exposures and releases as low as reasonably achievable (ALARA) until the area can be decontaminated. If controls beyond those required before the contamination event occurred are necessary for more than 24 hours, a report would be required.

Safety Equipment Related Events

A reporting requirement would be added for licensees to report within 24 hours of discovering any event in which equipment is disabled or fails to function as designed if (1) the equipment is required by regulation or license condition to prevent releases or exposures exceeding regulatory limits, or to mitigate the consequences of an accident; (2) the equipment is required to be available and operable when it is disabled or fails; and (3) no redundant equipment is available and operable to perform the required safety function when the failure occurs. This reporting requirement includes equipment failure, equipment damage, and procedural errors which cause equipment to fail or be disabled. NRC must be aware of these events to identify potential safety hazards and to ensure that the licensee

takes appropriate actions to protect workers and the public.

Licensees will need to exercise some judgment in determining when an event requires a 24-hour NRC notification. First, the licensee must determine whether the inoperable equipment was required by regulation or license condition to prevent releases or overexposures exceeding regulatory limits, or mitigate the consequences of an accident. Second, the licensee must determine whether the function of the equipment, or the availability of the function was needed when the equipment was disabled or failed to function. A 24-hour notification is not required under this requirement if neither the function nor its availability was required when the equipment was inoperable. Third, the licensee must determine whether redundant equipment was operable and available to perform the required safety function. The accident consequences to be mitigated by the equipment include major property damage, widespread contamination of uncontrolled areas, or fatalities or serious injuries requiring medical treatment.

The following are examples of events that would require a 24-hour NRC notification:

(1) Damage to a filtered ventilation system, required by regulation or license condition, that permits effluent air to bypass filters during operations. This bypass could result in either releases that exceed regulatory limits or exposure of personnel to levels of airborne radioactive material that exceed regulatory limits.

(2) Failure of equipment or shielding materials required by regulation or license condition to shield radiation from spent fuel or HLW.

(3) Failure of monitoring equipment required by regulation or license condition to verify that safe criticality conditions exist while spent fuel bundles are being moved in a pool.

This information is necessary to assure the NRC that when the function of required safety equipment has been lost, the licensee has taken appropriate action to compensate for the lost safety function or to eliminate the hazard requiring the safety function.

Written Reports

The proposed rule would require a written report within 30 days of any immediate or 24-hour notification. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the report contains all of the necessary information and the appropriate distribution is made.

Applicability of the Rule

The NRC believes that the proposed rule will have little or no impact on current part 72 licensees. The proposed rule would not apply to power reactor licensees who do not store spent fuel under a part 72 license. The rule would apply to research and test reactor licensees possessing spent fuel under a part 72 license, and not subject to the notification requirements in § 50.72. However, at the present time there are no part 72 licenses issued to research or test reactor licensees. With one exception (i.e., General Electric, Morris, IL), all current part 72 specific licensees are ISFSIs operated by nuclear power plants holding part 50 licenses. All of these power plants have incorporated their ISFSI into the reactor administrative procedures which include reporting procedures subject to the requirements in § 50.72. Therefore, the proposed rule would have no impact on these ISFSIs.

Environmental Impact: Categorical Exclusion

The NRC has determined that this proposed rule is the type of action described in the categorical exclusion 10 CFR 51.22(c)(3)(iii). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this regulation.

Paperwork Reduction Act Statement

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). This rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

The public reporting burden for this collection of information is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Information and Records Management Branch (MNBB–7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–3019 (3150–0132), Office of Management and Budget, Washington, DC 20503.

Regulatory Analysis

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the draft analysis may be obtained from Naiem S. Tanious, telephone (301) 492–3878. The Commission requests public comments on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the ADDRESSES heading.

Regulatory Flexibility Certification

The NRC has prepared a draft regulatory analysis of the impact of this proposed rule on small entities. The draft analysis indicates that the proposed rule is estimated to have no significant economic impact on part 72 licensees, because the estimated cost to industry of reporting postulated events would be in the range of $0–2112 annually. Moreover, none of the current part 72 licensees are considered small entities. The proposed rule would apply to research and test reactors who are small entities, should they choose to store spent fuel under a part 72 license. However none of these are part 72 licensees at present. In any case, no report would be required of licensees unless there is an incident involving spent fuel or HLW that meets the criteria specified in the proposed amendments. Hence, the impact on part 72 licensees should be minimal. The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the draft analysis may be obtained from Naiem S. Tanious, telephone (301) 492–3878.

Backfit Analysis

The NRC has determined that the backfit rule 10 CFR 50.109, does not apply to this proposed rule because these amendments do not involve any provisions which would impose backfits on licensees as defined in § 50.109(a)(1). Also, the NRC has determined that backfitting requirements in § 72.62 do not apply to this proposed event reporting requirements are not procedures required to operate an ISFSI or MRS. Therefore a backfit analysis is not required.

List of Subjects in 10 CFR Part 72

Manpower training programs, Nuclear materials, Occupational safety and health, Reporting and recordkeeping requirements, Security measures, Spent fuel.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; the Nuclear Waste Policy Act of 1982, as amended; and 5 U.S.C. 553, the Commission is proposing to adopt the following amendments to 10 CFR part 72.

PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

1. The authority citation for Part 72 is revised to read as follows:

Authority: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95–601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851); sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332); Secs. 131, 132, 133, 135, 137, 141, Pub. L. 97–425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100–203, 101 Stat. 1330–232, 1330–236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97–425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145 (g), Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10165(g); Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97–425, 96 Stat. 2202, 2203, 2204, 2222, 2224 (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

2. A new § 72.75 under subpart D—"Records, Reports, Inspections, and Enforcement"—is added to read as follows:

§ 72.75 Reporting requirements for events other than criticality.

(a) Immediate report. Each licensee shall notify the NRC as soon as possible but not later than 4 hours after the discovery of any of the following events or conditions involving spent fuel or HLW:

(1) An event that prevents immediate actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits, or releases of radioactive materials that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.).

(2) A defect in any spent fuel storage structure, system, or component which is important to safety.

(3) A significant reduction in the effectiveness of any spent fuel storage confinement system during use.

(4) An action taken in an emergency that departs from a license condition or a technical specification contained in a license issued under this part when the action is immediately needed to protect the public health and safety and no action consistent with license conditions and technical specifications that can provide adequate or equivalent protection is immediately apparent.

(5) An event that requires unplanned medical treatment at a medical facility of an individual with radioactive contamination on the individual's clothing or body which could cause further radioactive contamination.

(6) An unplanned fire or explosion damaging any spent fuel or HLW, or any device, container, or equipment containing spent fuel or HLW when the damage affects the integrity of the material or its container.

(b) Twenty-four hour report. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving spent fuel or HLW:

(1) Any unplanned contamination event that requires access to the contaminated area by workers or the public to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area.

(2) An event in which safety equipment is disabled or fails to function as designed when:

(i) The equipment is required by regulation or licensee condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;

(ii) The equipment is required to be available and operable when it is disabled or fails to function; and

(iii) No redundant equipment is available and operable to perform the required safety function.

(c) Preparation and submission of reports. Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.[2] To the extent that the information is available at the time of notification, the information provided on these reports must include:

(i) The caller's name and call back telephone number;

(ii) A description of the event, including date and time;

(iii) The exact location of the event;

(iv) The quantities, and chemical and physical form of the spent fuel or HLW involved; and

(v) Any personnel radiation exposure data available.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC, 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of 10 CFR part 20. The reports must include the following:

(i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;

(ii) The exact location of the event;

(iii) Quantities, and chemical and physical form of the spent fuel or HLW involved;

(iv) Date and time of the event;

(v) Corrective actions taken or planned and the results of any evaluations or assessments; and

(vi) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

(d) The provisions of § 72.75 do not apply to licensees who are required by their part 72 licenses to comply with the notification requirements in § 50.72 of this chapter. They do apply to research and test reactor licensees possessing material licensed under part 72 who are not subject to the notification requirements in § 50.72.

3. In § 72.142(b) Footnote 2 is redesignated as footnote 3.

4. Section 72.216 under Subpart K—"Reports"—is amended by adding a new paragraph (c) to read as follows:

[2] The commercial telephone number for the NRC Operations Center is (301) 951–0550.

§ 72.216 Reports

* * * * *

(c) The general licensee shall comply with § 72.75 of this chapter according to the terms of that section.

Dated at Rockville, Maryland, this 27th day of August, 1993.

For the Nuclear Regulatory Commission.

James M. Taylor,

Executive Director for Operations.

[FR Doc. 93–22390 Filed 9–13–93; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93–NM–130–AD]

Airworthiness Directives; Airbus Industrie Model A320 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Airbus Model A320 series airplanes. This proposal would require a cold expansion of certain attachment holes for the forward pintle fitting and certain holes at the actuating cylinder anchorage of the main landing gear (MLG). This proposal is prompted by reports that, during fatigue testing, cracking was found propagating from attachment holes for the forward pintle fitting of the MLG. The actions specified by the proposed AD are intended to prevent fatigue cracking, which may lead to rupture of the inner rear spar and subsequent reduced structural integrity of the wing.

DATES: Comments must be received by November 8, 1993.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–130–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac, Cedex France. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Stephen Slotte, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (206) 227–2797; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 93–NM–130–AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–130–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, recently notified the FAA that an unsafe condition may exist on certain Airbus Model A320 series airplanes. The DGAC advises that, during fatigue testing, cracking was found propagating from six attachment holes for the forward pintle fitting of the main landing gear (MLG). This cracking occurred on a test airplane between 69,000 and 83,000 simulated flights. Fatigue cracking, if not detected and corrected in a timely manner, could lead to rupture of the inner rear spar and subsequent reduced structural integrity of the wing.

Airbus Industrie has issued Service Bulletin A320–57–1060, dated December 8, 1992, that describes procedures for performing a cold expansion of all the attachment holes for the forward pintle fitting of the MLG, except for the holes that are for taper-lok bolts. The service bulletin also describes procedures for cold expansion of the holes that have not been previously cold expanded at the actuating cylinder anchorage of the MLG. The cold expansion increases the fatigue life of the rear spar. The DGAC classified this service bulletin as mandatory and issued Airworthiness Directive 92–276–035(B), dated December 23, 1992, in order to assure the continued airworthiness of these airplanes in France.

This airplane model is manufactured in France and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require a cold expansion of all the attachment holes for the forward pintle fitting of the MLG, except for the holes that are for taper-lok bolts. The proposed AD would also require a cold expansion of the holes that have not been previously cold expanded at the actuating cylinder anchorage of the MLG. The actions would be required to be accomplished in accordance with the service bulletin described previously.

The FAA estimates that 5 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 600 work hours per airplane to accomplish the proposed actions, and that the average labor rate is $55 per work hour. Required parts would be provided by the manufacturer at no cost to the operators. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be $165,000, or $33,000 per

airplane. This total cost figure assumes that no operator has yet accomplished the proposed requirements of this AD action.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES.**

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

Airbus Industrie: Docket 93–NM–130–AD.

Applicability: Model A320 series airplanes, manufacturer's serial numbers (MSN) 002 through 051 inclusive; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking, which could lead to reduced structural integrity of the wing, accomplish the following:

(a) Prior to the accumulation of 12,000 total landings, or within 2,000 landings after the effective date of this AD, whichever occurs later, accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD in accordance with Airbus Industrie Service Bulletin A320–57–1060, dated December 8, 1992.

(1) Perform a cold expansion of all the attachment holes for the forward pintle fitting of the MLG, except for the holes that are for taper-lok bolts.

(2) Perform a cold expansion of the holes at the actuating cylinder anchorage of the MLG.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(c) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on September 8, 1993.

David G. Hmiel,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 93–22369 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–13–P

---

14 CFR Part 39

[Docket No. 93–NM–137–AD]

Airworthiness Directives; SAAB-Scania Model SF340A and SAAB 340B Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain SAAB-Scania Model SF340A and SAAB 340B series airplanes. This proposal would require replacement of the left- and right-hand AC generator control relays with new relays at the generator control positions. This proposal is prompted by reports that in-service AC generator control relays, specifically used for generator transfer functions, have failed where the main contacts arced. The actions specified by the proposed AD are intended to prevent loss of AC electrical power, and local area damage that may lead to further electrical failures and smoke in the cockpit.

DATES: Comments must be received by November 8, 1993.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–137–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from SAAB-Scania AB, SAAB Aircraft Support Product, S–581.88, Linköping, Sweden. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Mark Quam, Aerospace Engineer, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98055–4056; telephone (206) 227–2145; fax (206) 227–1320.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 93–NM–137–AD." The

postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM–103, Attention: Rules Docket No. 93–NM–137–AD, 1601 Lind Avenue, SW., Renton, Washington 98055–4056.

Discussion

The Luftfartsverket (LFV), which is the airworthiness authority for Sweden, recently notified the FAA that an unsafe condition may exist on certain SAAB-Scania Model SF340A and SAAB 340B series airplanes. The LFV advises that eight in-service AC generator control relays, specifically used for generator transfer functions, have failed where the main contacts arced. Subsequent investigation has revealed that arcing is caused by insufficient transfer time within the relay and affects only those relays installed in a generator transfer position. Arcing of the subject area can cause the airplane to lose AC electrical power from the generator on the affected side. Arcing also could cause metal from the relay case to melt onto the electrical wires routed below the relays, which could result in local area damage that may lead to further electrical failures and smoke in the cockpit.

SAAB-Scania has issued SAAB 340 Service Bulletin SAAB 340–24–022, dated October 21, 1992, that describes procedures for replacement of the left- and right-hand AC generator control relays, part number (P/N) SM15CXD1, with new relays, P/N SM15CXD4, at generator control positions 7XA and 8XA. The LFV classified this service bulletin as mandatory and issued Swedish Airworthiness Directive SAD No. 1–057, dated October 31, 1992, in order to assure the continued airworthiness of these airplanes in Sweden.

This airplane model is manufactured in Sweden and is type certificated for operation in the United States under the provisions of § 21.29 of the Federal Aviation Regulations and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the LFV has kept the FAA informed of the situation described above. The FAA has examined the findings of the LFV, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require replacement of the left- and right-hand AC generator control relays, part number (P/N) SM15CXD1, with new relays, P/N SM15CXD4, at the generator control positions (7XA/8XA). The actions would be required to be accomplished in accordance with the service bulletin described previously.

The FAA estimates that 200 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 2.5 work hours per airplane to accomplish the proposed actions, and that the average labor rate is $55 per work hour. Required parts would be provided by the manufacturer at no cost to the operators. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be $27,500, or $137.50 per airplane. This total cost figure assumes that no operator has yet accomplished the proposed requirements of this AD action.

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption **ADDRESSES**.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 14 CFR part 39 of the Federal Aviation Regulations as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1421 and 1423; 49 U.S.C. 106(g); and 14 CFR 11.89.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

SAAB-Scania: Docket 93–NM–137–AD.

Applicability: Model SAAB SF340A series airplanes, serial numbers 004 through 159 inclusive; and Model SAAB 340B series airplanes, serial numbers 160 through 325 inclusive; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of AC electrical power, and local area damage that may lead to further electrical failures and smoke in the cockpit, accomplish the following:

(a) Within 6 months after the effective date of this AD, replace the left- and right-hand AC generator control relays, part number (P/N) SM15CXD1, with new relays, P/N SM15CXD4, at generator control positions 7XA and 8XA, in accordance with SAAB 340 Service Bulletin SAAB 340–24–022, dated October 21, 1992.

(b) As of the effective date of this AD, no person shall install an AC generator control relay, P/N SM15CXD1, at generator control positions 7XA or 8XA on any airplane.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM–113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM–113.

Note: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM–113.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on September 8, 1993.

David G. Hmiel,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 93–22370 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–13–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Chapter I

[FRL–4728–6]

Open Meeting on the Definition of Solid Waste and Hazardous Waste Recycling

AGENCY: Environmental Protection Agency.

ACTION: Notice of public meeting.

SUMMARY: The Environmental Protection Agency (EPA) is conducting a public meeting on revising the regulatory definition of solid waste under the Resource Conservation and Recovery Act (RCRA). The revisions are intended to simplify the regulations and to eliminate disincentives to recycling while maintaining full protection of human health and the environment. They are also intended to reduce any possible current underregulation of hazardous waste recycling.

DATES: The meeting will take place on October 5, 1993 from 9:30 a.m. to 6 p.m., and on October 6, 1993 from 8:30 a.m. to 5 p.m.

ADDRESSES: The meeting will take place at the DuPont Plaza Hotel at 1500 New Hampshire Avenue NW., Washington, DC 20036 (202–483–6000).

FOR FURTHER INFORMATION CONTACT: For additional information on the meeting, please contact Sarah Davis at EPA's Office of Solid Waste at (202) 260–8104.

SUPPLEMENTARY INFORMATION: The Agency has selected sixteen individuals to provide technical and policy expertise at the meeting. These individuals will provide their opinions about the issues of hazardous waste recycling and how the federal solid waste rules affect such recycling. The individuals are:

Dorothy Kelly (Ciba-Geigy Corp.)
John Fognani (Gibson, Dunn, and Crutcher)
Harvey Alter (Chamber of Commerce)
Jeff Reamy (Phillips Petroleum Co.)
Jon Jewett (Solite Corp.)
Robert Wescott (Wesco Parts Cleaners)
Richard Fortuna (Hazardous Waste Treatment Council)
John Wittenborn (Collier, Rill, Shannon, and Scott)
William Collinson (General Motors Corp.)
Gerald Dumas (RSR Corp.)
Kevin Igli (Waste Management Inc.)
Karen Florini (Consultant)
David Lennett (Consultant)
Melinda Taylor (Consultant)
Roy Brower (State of Oregon)
Pat Matuseski (State of Minnesota)

EPA participants in the discussions will be James Berlow, Director of the Definition of Solid Waste Task Force, and Andy Bellina from EPA Region II. In addition, any interested member of the public may attend the meeting.

Dated: September 8, 1993.

Chris Kirtz,

Director, Consensus and Dispute Resolution Program.

[FR Doc. 93–22440 Filed 9–13–93; 8:45 am]

BILLING CODE 6560-50-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AB94

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for 12 Plants From the Hawaiian Islands

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) proposes endangered status pursuant to the Endangered Species Act of 1973, as amended (Act), for 12 plants: *Adenophorus periens* (pendant kihi fern), *Bonamia menziesii* (no common name (NCN)), *Diellia erecta* (NCN), *Flueggea neowawraea* (mehamehame), *Hibiscus brackenridgei* (ma'o hau hele), *Mariscus pennatiformis* (NCN), *Neraudia sericea* (NCN), *Plantago princeps* (laukahi kuahiwi), *Sesbania tomentosa* ('ohai), *Solanum incompletum* (popolo ku mai), *Spermolepis hawaiiensis* (NCN), and *Vigna o-wahuensis* (NCN). These 12 species are found on one or more of the following Hawaiian Islands: Laysan, Necker, Nihoa, Niihau, Kauai, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii. The 12 plant species and their habitats have been variously affected or are currently threatened by one or more of the following: habitat degradation and/or predation by wild, feral, or domestic animals (pigs, goats, deer, cattle); competition for space, light, water, and nutrients by naturalized, introduced vegetation; habitat loss from fires; human impacts from recreational activities; and insect infestations. Due to the small number of existing individuals and/or their very narrow distributions, these species and most of their populations are subject to an increased likelihood of extinction and/or reduced reproductive vigor from stochastic events. This proposal, if made final, would implement the Federal protection and recovery provisions provided by the Act. If made final, it would also implement State regulations protecting these plants as endangered species. Comments and materials related to this proposal are solicited.

DATES: Comments from all interested parties must be received by November 15, 1993. Public hearing requests must be received by October 29, 1993.

ADDRESSES: Comments and materials concerning this proposal should be sent to Robert P. Smith, Field Supervisor, Pacific Islands Office, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, room 6307, P.O. Box 50167, Honolulu, Hawaii 96850. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT:

Robert P. Smith, at the above address (808/541–2749).

SUPPLEMENTARY INFORMATION:

Background

Adenophorus periens, Bonamia menziesii, Diellia erecta, Flueggea neowawraea, Hibiscus brackenridgei, Mariscus pennatiformis, Neraudia sericea, Plantago princeps, Sesbania tomentosa, Solanum incompletum, Spermolepis hawaiiensis, and *Vigna o-wahuensis* are currently known from 11 Hawaiian Islands: Laysan, Necker, Nihoa, Niihau, Kauai, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii. The current and historical distribution by island is presented in Table 1 for each of the 12 species.

TABLE 1.—SUMMARY OF ISLAND DISTRIBUTION OF THE PROPOSED SPECIES

Species	Hawaiian Islands										
	LY	NE	NH	NI	KA	OA	MO	LA	KH	MA	HA
Adenophorus periens	.....	.....	.....	.....	C	H	C	H	.....	H	C
Bonamia menziesii	.....	.....	.....	.....	C	C	H	C	.....	C	C
Diellia erecta	.....	.....	.....	.....	H	H	C	H	.....	C	C
Flueggea neowawraea	.....	.....	.....	.....	C	C	H	.....	.....	C	C
Hibiscus brackenridgei	.....	.....	.....	.....	C?	C	H	C	H	C	C
Mariscus pennatiformis	C	.....	.....	.....	H	H	.....	.....	.....	C?	H
Neraudia sericea	.....	.....	.....	.....	.....	.....	C	H	H	C	.....
Plantago princeps	.....	.....	.....	.....	C	C	C	.....	.....	C	H
Sesbania tomentosa	.....	C	C	C	C	C	C	C	C	C	C
Solanum incompletum	.....	.....	.....	.....	C?	.....	C?	H	.....	H	C
Spermolepis hawaiiensis	.....	.....	.....	.....	H	C	C	C	.....	C	C?
Vigna o-wahuensis	.....	.....	.....	H	H	H	C	C	C	H	C

C=current; population last observed within the past 50 years.
H=historical; population not seen for over 50 years.
?=questionable locality or inconsistent information in sources.
LY—Laysan; NE—Necker; NH—Nihoa; NI—Niihau; KA—Kauai; OA—Oahu; MO—Molokai; LA—Lanai; KH—Kahoolawe; MA—Maui, HA—Hawaii.

The Hawaiian archipelago includes eight large volcanic islands (Niihau, Kauai, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii), as well as offshore islets, shoals, and atolls set on submerged volcanic remnants at the northwest end of the chain (the Northwestern Hawaiian Islands). The archipelago covers a land area of about 16,600 square kilometers (sq km) (6,400 sq miles (mi)), extending roughly between latitude 18°50′ to 28°15′ N and longitude 154°40′ to 178°70′ W, and ranging in elevation from sea level to 4,200 meters (m) (13,800 feet (ft)) (Dept. of Geography 1983). The regional geological setting is a mid-oceanic volcanic island archipelago set in a roughly northwest to southeast line, with younger islands to the southeast. The youngest island, Hawaii, is volcanically active. The older islands are increasingly eroded, so that the basaltic portions of many of the northwesternmost islands (such as Laysan, Necker, and Nihoa) are entirely submerged, and coralline atolls and shoals are often all that remain above sea level (Macdonald *et al.* 1986). The topography of the Hawaiian Islands is extremely diverse. On the youngest islands, Hawaii and Maui, gently sloping unweathered shield volcanoes with very poor soil development are juxtaposed with older, heavily weathered valleys with steep walls, well-developed streams, and gently sloped flood plains. The older islands to the northwest (i.e., Niihau, Kauai, Oahu, and Molokai) are generally more weathered. On a typical older island, sea cliffs and large amphitheater-headed valleys on the windward (northeast) side contrast with erosionally younger, dissected slopes on the leeward (southwest) side (Dept. of Geography 1983).

The climate of the Hawaiian Islands reflects the tropical setting buffered by the surrounding ocean (Dept. of Geography 1983). The prevailing winds are northeast trades with some seasonal fluctuation in strength. There are also winter storm systems and occasional hurricanes. Temperatures vary over the year an average of 5° Celsius (C) (11° Fahrenheit (F)) or less, with daily variation usually exceeding seasonal variation in temperature. Temperature varies with elevation and ranges from a maximum recorded temperature of 37.7°C (99.9°F), measured at 265 m (870 ft) elevation, to a minimum of −12.7°C (9.1°F) recorded at 4,205 m (13,795 ft) elevation. Annual rainfall varies greatly by location, with marked windward to leeward gradients over short distances. Minimum average annual rainfall is less than 250 millimeters (mm) (10 inches (in)); the maximum average precipitation is well in excess of 11,000 mm (450 in) per year. Precipitation is greatest during the months of October through April. A dry season is apparent in leeward settings, while windward settings generally receive tradewind-driven rainfall throughout the year (Dept. of Geography 1983).

The native-dominated vegetation of the Hawaiian Islands varies greatly according to elevation, moisture regime, and substrate. The most recent classification of Hawaiian natural communities recognizes nearly 100 native vegetation types (Gagne and Cuddihy 1990). Within these types are numerous island-specific or region-specific associations, comprising an extremely rich array of vegetation types within a very limited geographic area. Major vegetation formations include forests, woodlands, shrublands, grasslands, herblands, and pioneer associations on lava and cinder substrates.

There are lowland, montane, and subalpine forest types in Hawaii, extending from sea level to above 3,000 m (9,800 ft) in elevation. Coastal and lowland forests are generally dry or mesic and may be open- or closed-canopied. The stature of lowland forests is generally under 10 m (30 ft). Eleven of the species proposed for listing, (*Adenophorus periens, Bonamia menziesii, Diellia erecta, Flueggea neowawraea, Hibiscus brackenridgei, Mariscus pennatiformis, Neraudia sericea, Plantago princeps, Solanum incompletum, Spermolepis hawaiiensis,* and *Vigna o-wahuensis*) have been reported from lowland forest habitat. Montane forests, occupying elevations between 1,000 and 2,000 m (3,000 and 6,000 ft), are dry to mesic on the leeward slopes of the islands of Kauai, Maui, and Hawaii. On those islands, as well as Oahu, Molokai, and Lanai, mesic to wet motane forests occur on the windward slopes and summits. The dry and mesic forests may be open- to closed-canopied, and may exceed 20 m (65 ft) in stature. Of the proposed species, four (*Diellia erecta, Plantago princeps, Solanum incompletum,* and *Vigna o-wahuensis*) have been reported from montane mesic and dry forest habitats. Montane wet forests are usually dominated by several species of native trees and tree ferns. Three of the proposed species (*Adenophorus periens, Mariscus pennatiformis,* and *Plantago princeps*) have been reported from montane wet forest habitat. At high montane and subalpine elevations, at and above 2,000 m (6,500 ft) elevation, are subalpine forests, usually open-

canopied and forming a mosaic with surrounding grasslands and shrublands. Subalpine forests are known only from Haleakala on East Maui and from Hualalai, Mauna Kea, and Mauna Loa on Hawaii. *Solanum incompletum* has been reported from subalpine forest habitat.

Hawaiian shrublands are also found from coastal to alpine elevations. The majority of Hawaiian shrubland types are in dry and mesic settings, or on cliffs and slopes too steep to support trees. Wet motane shrublands are typically dominated by *Metrosideros* ('ohi'a). Proposed taxa reported from native shrublands included *Bonamia menziesii, Hibiscus brackenridgei,* and *Sesbania tomentosa.* Hawaiian grassland types are found from coastal to subalpine settings. Coastal and lowland grasslands are known from the Northwestern Hawaiian Islands, Kauai, Oahu, Molokai, Lanai, Maui, and Hawaii. Both *Hibiscus brackenridgei* and *Vigna o-wahuensis* have been reported from native grasslands.

The land that supports these 12 plant species is owned by various private parties, the City and County of Honolulu, the County of Maui, the State of Hawaii (including State parks, forest reserves, natural area reserves, and Hawaiian Home Lands), and the Federal government (including national parks, national wildlife refuges, national historic sites, and the Department of Defense).

Discussion of the 12 Species Proposed for Listing

Adenophorus periens was first collected by Captain Fredrick William Beechey in the 1820s or 1830s. It was not formally described until 1974, when L. Earl Bishop published the name *Adenophorus periens.* Prior to its description, the names *Polypodium adenophorus* and *Adenophorus pinnatifidus* had been erroneously applied to the species represented by Beechey's specimen (Bishop 1974).

Adenophorus periens, a member of the grammitis family (Grammitidaceae), is a small, pendant, epiphytic (not rooted on the ground) fern. The rhizome (prostrate stem) is covered with small dark, stiff scales 2 to 4 centimers (cm) (0.8 to 1.6 in) long. Its yellowish green fronds are usually between 10 and 40 cm (4 and 16 in) long and covered with hairs. The fronds have slightly hairy stalks less than 1 cm (0.4 in) long. Each frond is comprised of oblong or narrowly triangular pinnae (divisions or leaflets) 5 to 15 mm (0.2 to 0.6 in) long with margins that are smooth or toothed and lined with sparse hairs. The pinnae are situated perpendicular to the axis of the midrib, with each pinna twisted such that its upper surface faces upward. Round sori (groups of spore-producing bodies) usually develop in the central portion of the fertile frond, forming two regular rows on each pinna. This species differs from other species in this endemic Hawaiian genus by having hairs along the pinna margins, pinnae at right angles to the midrib axis, by the placement of the sori, and the degree of dissection of each pinna (Bishop 1970, 1974; Hillebrand 1888; Linney 1989).

Historically, *Adenophorus periens* was known from the following general areas: Halemanu on Kauai, the Koolau Mountains of Oahu, the summit Lanai, Kula Pipeline on East Maui, and Hilo and Waimea on Hawaii Island (Hawaii Hertiage Program (HHP) 1992a1 to 1992a6, 1992a10 to 1992a13). Currently, *Adenophorus periens* is known from several locations on three islands. On Kauai, one population is known from the boundary of Hono O Na Pali Natural Area Reserve (NAR) and Na Pali Coast State Park on State land, one from Waioli on State land, and four are clustered in the Wahiawa area over a distance of 2 sq km (0.8 sq mi) on private land (HHP 1992a15 to 1992a17; Hawaii Plant Conservation Center (HPCC) 1991b, 1991c; Lorence and Flynn 1991). On Molokai, a single population of three plants occurs on private land at Kamakou Preserve (HHP 1992a7). On the island of Hawaii, four populations are found at Olaa Tract, Kane Nui o Hamo Crater, Kahaualea NAR, and 2.4 km (1.5 mi) northwest of Puu Kauka on private, State, and Federal land (L. Cuddihy, in litt., 1983, 1988; HHP 1992a8, 1992a9, 1992a14). The statewide total of 11 current populations comprises approximately 1,280 individuals of this species; on Kauai there are about 63 individuals, on Molokai there are 3, and on Hawaii there are approximately 1,215 (L. Cuddihy, in litt., 1983, 1988; HHP 1992a7 to 1992a9, 1992a14 to 1992a17; HPCC 1991a to 1991c; Lorence and Flynn 1991).

Adenophorus periens is found in *Metrosideros polymorpha* ('Ohi'a)/*Cibotium glaucum* (Hapu'u) Lowland Wet Forest between 470 and 1,270 m (1,540 and 4,140 ft) in elevation (HHP 1992a7, 1992a8, 1992a14 to 1992a16). Associated species include *Broussaisia arguta* (kanawao ke'oke'o), *Cheirodendron trigynum* ('olapa), *Dicranopteris linearis* (uluhe), *Freycinetia arborea* ('ie'ie), and *Psychotria hawaiiensis* (kopiko) (HHP 1992a7, 1992a8, 1992a15, 1992a16). The primary threats to *Adenophorus periens* are habitat degradation by *Sus scrofa* (pigs); competition for light, space, nutrients, and water with alien plant species; and habitat destruction by fires.

Asa Gray gave the name *Bonamia menziesii* to a plant from the Sandwich Islands (Hawaii) in honor of its collector, Archibald Menzies (Gray 1862). Wilhelm Hillebrand (1888) placed the species into the segregate genus *Breweria.* Otto Degener (1932a, 1932b) described a new genus, *Perispermum,* and placed Bonamia menziesii in it. He also described another species of *Perispermum, P. albiflorum.* T. Myint and D.B. Ward (1968) recognized only one Hawaiian species and placed it in the genus *Bonamia.* They recognized two varieties: variety *menziesii* and a new variety, *rockii.* The current treatment (Austin 1990) recognizes only one species with no subspecific taxa.

Bonamia menziesii, a member of the morning-glory family (Convoluvulaceae), is a vine with twining branches up to 10 m (33 ft) long that are fuzzy when young. The leathery, oblong to oval leaves measure 3 to 9 cm (1.2 to 3.5 in) in length and 1 to 4 cm (0.4 to 1.6 in) wide. The upper leaf surface is usually hairless or covered with sparse hairs and the lower surface is covered with dense fuzzy hairs. The white to greenish funnel-shaped flowers, each 2.5 mm (0.08 to 0.1 in) long, are produced singly or in clusters of three on stalks 1 to 2 cm (0.4 to 0.8 in) long with tiny bracts (modified leaves) at the base of each stalk. Stamens usually have glandular hairs at their bases. The flower has two styles that are separate or partly fused. The fruits are tan or yellowish brown capsules 1 to 1.5 cm (0.4 to 0.6 in) long that contain 1 or 2 oval seeds imbeded in black pulp. This species is the only member of the genus that is endemic to the Hawaiian Islands and differs from other genera in the family by its two styles, longer stems and petioles, and rounder leaves (Austin 1990).

Historically, *Bonamia menziesii* was known from the following general areas: scattered locations on Kauai, the Waianae Mountains of Oahu, scattered locations on Molokai, and the eastern sides of Maui and Hawaii (HHP 1992b3, 1992b4, 1992b10, 1992b11, 1992b13, 1992b15 to 1992b17, 1992b28, 1992b35). Currently, *Bonamia menziesii* is known from 28 populations on 5 islands. On Kauai, a total a five populations is known from Kalalau, Paaiki Valley, Mount Kahili (all on State land), and Wahiawa drainage on private land (HHP 1992b25 to 1992b27, Lorence and Flynn 1991). On Oahu, *Bonamia menziesii* is known from both the Waianae and the Koolau Mountains. In

the Waianae Mountains between Kuaokala and Nanakuli, 10 populations are spread over a distance of 24 km (15 mi) on Federal, private, and State land; 8 of these populations are clustered on the northernmost section over a distance of 8 km (5 mi) (HHP 1992b6, 1992b8, 1992b9, 1992b12, 1992b19, 1992b20, 1992b22, 1992b23, 1992b30, 1992b34). In the southeastern part of the Koolau Mountains, five populations are found over an area of 6 sq km (2.5 sq mi) on private and State land (HHP 1992b5, 1992b14, 1992b18, 1992b21, 1992b31). On Lanai, *Bonamia menziesii* is known from four scattered locations from Kanepuu to Puhielelu on private land (Garnett 1991; HHP 1992b1, 1992b2, 1992b32; HPCC 1991d). On Maui, one population is known from the western slopes of West Maui on private land and two populations are located on East Maui on private and State land (HHP 1992b24, 1992b29, 1992b33). On the island on Hawaii, a single population is located at Kaupulehu on private land (HHP 1992b7). The total current populations throughout the State consist of approximately 200 individuals, with the largest populations occurring on Oahu (HHP 1992b14, 1992b21, 1992b23, 1992b30). On Kauai, there are approximately 28 plants; on Oahu no more than 150; on Lanai approximately 9; on Maui a total of 10; and on the island of Hawaii at least 1 specimen has been collected (HHP 1992b1, 1992b2, 1992b5 to 1992b12, 1992b14, 1992b18 to 1992b27, 1992b29 to 1992b34; Lorence and Flynn 1991).

Bonamia menziesii is found on steep slopes in dry to mesic forest and sometimes in wet forest between the elevation of 150 and 625 m (492 and 2,051 ft) (Austin 1990). Associated species included 'ohi'a, *Canthium odoratum* (alahe'e), *Nestegis sandwicense* (olopua), *Pisonia* sp. (papala kepau), and *Sapindus oahuensis* (lonomea) (HHP 1992b1, 1992b2, 1992b4, 1992b7 to 1992b9, 1992b18 to 1992b20, 1992b22, 1992b23, 1992b25, 1992b27, 1992b30, 1992b31, 1992b33). The primary threats to *Bonamia menziesii* are habitat degradation and possible predation by wild and feral ungulates (pigs, goats (*Capra hirus*), axis deer (*Axis axis*), black-tailed deer (*Odocoileus hemionus*), and cattle (*Bos taurus*)), competition with a variety of alien plant species, and fire.

Diellia erecta was described by William Dunlop Brackenridge based on a specimen collected during the Wilkes Expedition in 1840 (Brackenridge 1854). He also described *Diellia pumila* which subsequently has been considered a depauperate form of *D. erecta*. *Davallia alexandri* was published by Hillebrand in 1873. It has subsequently been considered a form of *D. erecta* with finely dissected fronds. *Diellia erecta* and *Davallia alexandri* had been placed in the genus *Lindsaya* by certain early authors, and *Diellia erecta* into the genus *Schizoloma*. Degener and Amy B. Greenwell (1950) published the new combination *Diellia erecta* var. *falcata* for a taxon originally described by Brackenridge as *Diellia falcata*. However, further study has been established that *Diellia falcata* is best considered a separate species. *Diellia erecta* is now considered to be a species with no subspecific taxa (Wagner 1952, Wagner and Wagner 1992).

Diellia erecta, a member of the spleenwort family (Aspleniaceae), is a fern that grows in tufts of 3 to 9 lance-shaped fronds, each 20 to 70 cm (8 to 28 in) long. The fronds emerge from a 1 to 2.5 cm (0.4 to 1 in) long rhizome covered with brown to dark gray scales. The frond stalks are reddish brown to black and smooth and glossy, 2 to 21 cm (0.8 to 8.3 in) long, and have a few stiff scales at their bases. Each frond has 15 to 50 lance-shaped pinnae arranged oppositely long the midrib. The pinnae are usually between 2 and 4 cm (0.8 and 1.6 in) long and 4 to 8 mm (0.2 to 0.3 in) wide. Ten to 20 sori, which may be separate or fused, are borne on each margin of the pinna. Each sorus is covered by an indusium (protective membrane) that falls short of the edge of the frond and runs parallel to the edge of each pinna. This species differs from other members of the genus in having brown or dark gray scales usually more than 2 cm (0.8 in) in length, fused or separate sori along with margins, shiny black midribs that have a hardened surface, and veins that do not usually encircle the sori (Degener and Greenwell 1950, Hillebrand 1888, Robinson 1912, Smith 1934, Wagner 1952).

Historically, *Diellia erecta* was known from the Kokee area on Kauai; the Koolau Mountains on Oahu, Pukoo, Pelekunu Valley, and Kaunakakai Gulch on Molokai; Mahana Valley and Hauola Gulch on Lanai; scattered locations on West Maui; and various locations on Hawaii Island (HHP 1992c1 to 1992c3, 1992c6, 1992c8 to 1992c11, 1992c16, 1992c18 to 1992c26). Currently *Diellia erecta* is only known from Molokai, Maui, and Hawaii. On Molokai, there are four locations with an unknown number of individuals at Halawa Valley, Kahuaawi Gulch, Mokolelau, and Puu Kolekole on private land (HHP 1992c12, 1992c14, 1992c15; Robert Hobdy, Hawaii State Division of Forestry and Wildlife (DOFAW), (pers. Comm., 1991). On Maui there is a total of at least 38 individuals at 7 locations: 4 populations on West Maui at Iao Valley on private land, and Kanaha Stream, Manawainui Plant Sanctuary, and Papalaua Gulch on State land; and 3 populations on East Maui at Olinda, Waiopai Gulch, and near Makawao on State and private land (HHP 1992c4, 1992c5, 1992c7, 1992c13, 1992c17; HPCC 1990a; Joel Lau, HHP, and R. Hobdy, pers. comms., 1992). On the island of Hawaii, there are 2 populations on State land: one at Honomalino with over 20 plants, and one at Manuka NAR with at least 1 plant (J. Lau, pers. comm., 1992). Statewide, this species has a total of 13 populations and approximately 63 known individuals.

Diellia erecta is found in *Diospyros sandwicensis* (Lama)/'Ohi'a Lowland Mesic Forest between 210 and 1,590 m (700 and 5,200 ft) in elevation (HHP 1992c21; HPCC 1990a; R. Hobdy, pers. comm. 1992). Other associated plant species include *Dodonaea viscosa* ('a'ali'i), *Dryopteris unidentata*, *Pleomele auwahiensis* (halapepe), *Syzygium sandwicensis* ('ohi'a ha), and *Wikstroemia* sp. ('akia) (HPCC 1990a). The major threats to *Diellia erecta* are habitat degradation by pigs, goats, and cattle; competition with alien plant species; and stochastic extinction due to the small number of existing individuals.

In 1912, Joseph F. Rock collected the first specimens of *Flueggea neowawraea* from Kapua on the island of Hawaii (Rock 1913). Based on his specimens, he established the monotypic genus *Neowawraea*, named for Dr. Heinrich W. Wawra, a colleague of Rock's. He named the species *Neowawraea phyllanthoides* because of its apparent resemblance to *Phyllanthus*, a member of the same family (Euphorbiaceae). Earl Edward Sherff (1939) later transferred the taxon to the genus *Drypetes*. W. John Hayden (1987), upon further investigation, placed the species in the genus *Flueggea*. Because retention of the specific epithet would result in a later homonym, Hayden chose to maintain the tribute to Wawra in the new epithet, *neowawraea*.

Flueggea neowawraea, a member of the spurge family (Euphorbiaceae), is a large tree up to 30 m (100 ft) tall and 2 m (7 ft) in diameter with white oblong pores covering its scaly, pale brown bark. The thin, papery, oval leaves, 4 to 14 cm (1.5 to 5.5 in) long and 2 to 9 cm (0.8 to 3.5 in) wide, are green on the upper surface and pale green on the lower surface. Plants are usually dioecious (having separate male and female plants) with unisexual flowers lacking petals. Male flowers, on stalks less than 4 mm (0.2 in) long, have 5

green sepals with brownish tips. The female flowers, on stalks 1 to 2.5 mm (0.04 to 0.1 in) long, have sepals of unequal length with irregular margins. The two-lobed stigma is positioned atop a 2.5 to 3 mm (0.1 in) long, round ovary with a nectary disk. The fleshy, round fruits, about 5 mm (0.2 in) in diameter, are reddish brown to black and contain two slightly curved seeds about 3 mm (0.1 in) long that are somewhat triangular in cross section. This species is the only member of the genus found in Hawaii and can be distinguished from other species in the genus by its large size; scaly bark; the shape, size, and color of the leaves; flowers clustered along the branches; and the size and shape of the fruits (Hayden 1990, Linney 1982, Neal 1965).

Historically, *Flueggea neowawraea* was known from Waihii near Kapuna on Molokai, but is now presumed extinct on that island (HHP 1992d25, Hayden 1990). This species was also known from Kealia Trail, Kahanahaiki Valley, and Pohakea Gulch in the Waianae Mountains of Oahu (HHP 1992d5, 1992d10, 1992d33). Currently, *Flueggea neowawraea* is known on Kauai from Limahuli Valley, Kalalau, Pohakuao, and from the Koaie and Poomau branches of Waimea Canyon (HHP 1992d17, 1992d18, 1992d30 to 1992d32; HPCC 1990b; J. Lau, pers. comm., 1992). Also, three individuals (some of which may be dead) are known from the two adjacent valleys of Mahanaloa and Paaiki, near Makaha Point, on State-owned land (HHP 1992d9, 1992d13). Only one unhealthy individual is known from Limahuli Valley on privately owned land (HHP 1992d17). One tree is known from Kalalau and 10 from Pohakuao on State-owned land (J. Lau, pers. comm., 1992). Sixteen trees are known from the Poomau branch of Waimea Canyon, and 40 to 80 individuals are known from 4 scattered populations along the Koaie branch of Waimea Canyon on State-owned land (HHP 1992d18, 1992d30, 1992d31; HPCC 1990b; J. Lau, pers. comm., 1992). On Oahu *Flueggea neowawraea* is currently known from 15 locations with approximately 33 individuals in the Waianae Mountains. The populations are spread from East Kapuahikahi Gulch to Puumaialau Gulch over a distance of about 15.5 km (9.6 mi) on Federal, State, County, and private land (HHP 1992d1 to 1992d4, 1992d6 to 1992d8, 1992d11, 1992d12, 1992d14 to 1992d16, 1992d19, 1992d20, 1992d24, 1992d26, 1992d29; J. Lau, pers. comm., 1992). On East Maui, one or two individuals are known from Auwahi on the southwest slope of Haleakala at approximately 850 m (2,800 ft) elevation on privately owned land (HHP 1992d23). Five populations are known from the island of Hawaii in South Kona and Kau, extending over an area of about 10 by 5 km (6 by 3 mi) from Papa to Manuka, and numbering approximately 20 individuals, on State and private land (HHP 1992d21, 1992d22, 1992d27, 1992d28, 1992d34, 1992d35; J. Lau, pers. comm., 1990). A Hawaii Island population on private land at Huehue Ranch in North Kona consists of an unknown number of individuals (Hayden 1990). Statewide, the species totals 28 populations containing approximately 127 to 167 known individuals.

Flueggea neowawraea occurs in dry to mesic forest at 250 to 1,000 m (820 to 3,280 ft) elevation (Hayden 1990). Associated plant species include alahèe, lama, *Aleurites moluccana* (kukui), *Antidesma pulvinatum* (hame), and *Streblus pendulina* (aìaì) (HHP 1992d3, 1992d7, 1992d9, 1992d12 to 1992d19, 1992d30, 1992d31, 1992d34). The primary threat to the threat to the continued existence of *Flueggea neowawraea* is *Xylosandrus compactus*, the black twig borer, which has affected all known *Flueggea neowawraea* plants. Other major threats include habitat degradation by feral and wild ungulates (pigs, goats, deer, and cattle), competition with alien plant species, and fire. The small population size with its limited gene pool and depressed reproductive vigor, compounded by a requirement for cross-pollination because the species is dioecious, must be considered a serious threat.

In 1838, Asa Gray described *Hibiscus brackenridgei* from a specimen collected on West Maui (Roe 1961). Then, in 1930, Edward Leonard Caum published two varieties, *molokaiana* and *kauaiana*, based upon type specimens from the islands of Molokai and Kauai. An additional variety, var. *mokuleiana*, was named by Sister Margaret James Roe in 1961. In 1990, David Bates recognized two subspecific taxa: ssp. *mokuleianus* and ssp. *brackenridgei* (including var. *molokaiana*). He placed *Hibiscus brackenridgei* var. *kauaiana* in synonymy with a non-Hawaiian species of *Hibiscus, H. calyphyllus*.

Hibiscus brackenridgei, a member of the mallow family (Malvaceae), is a sprawling to erect shrub or small tree up to 5 m (16 ft) tall. Most plant parts (young branches, leaves, and some flower parts) vary in the degree of hairiness. The leaves, about 5 to 15 cm (2 to 6 in) long and equally wide, have three to seven lobes but are generally heart-shaped in outline. Beneath each leaf stalk is a pair of very thin stipules (leaf-like appendages), 5 to 15 mm (0.2 to 0.6 in) long, that fall off early in development, leaving an elliptic scar. Flowers are borne singly or in small clusters. The petals, between 3.5 and 8 cm (1.4 and 3.1 in) long, are yellow, usually with a maroon spot in the center of the flower. Each triangular calyx lobe is reddish to yellow, and usually has a raised, elongated gland on the midrib. Seven to 10 bracts are attached below the calyx. The staminal column, which has anthers attached to the upper three-fourths or nearly to the base, extends beyond the petals. The fruits are somewhat round or oval capsules 1.1 to 2 cm (0.4 to 0.8 in) long that have a beak-like appendage at one end. This species differs from other members of the genus in having the following combination of characteristics: yellow petals, a calyx comprised of triangular lobes with raised veins and a single midrib often bearing a prominent elongated gland, 7 to 10 bracts attached below the calyx, and thin stipules 5 to 15 mm (0.2 to 0.6 in) long that fall off, leaving an elliptic scar (Bates 1990).

Hibiscus brackenridgei is currently known from Oahu, Lanai, Maui, and Hawaii; it may possibly occur on Kauai. A total of 12 populations is known to exist, containing approximately 60 individuals. The two recognized subspecies are discussed separately below. *Hibiscus brackenridgei* ssp. *brackenridgei* was known historically from Laau Point on Molokai (HHP 1992e7), from scattered locations on Lanai, and from Pohakea Gulch south to near McGregor Point on West Maui (HHP 1992e4, 1992e5, 1992e10 to 1992e13, 1992e15). *Hibiscus brackenridgei* was also collected from an unspecified site on Kahoolawe (HHP 1992e17). However, the specimen is unavailable, and the subspecies was not determined (Bates 1990). Currently, *Hibiscus brackenridgei* ssp. *brackenridgei* consists of about 7 populations containing probably fewer than 60 individuals on State and private land on the islands of Lanai, Maui, and Hawaii (HHP 1992e1 to 1992e3, 1992e6, 1992e9, 1992e14, 1992e16; HPCC 1990c, 1991e; J. Lau, pers. comm., 1992). On Lanai, only 5 or 6 plants remain near Keomuku Road at 275 m (900 ft) elevation on privately owned land (HHP 1992e14, HPCC 1991e). On West Maui, *Hibiscus brackenridgei* ssp. *brackenridgei* is known from two populations occurring at Kaunohua Gulch and the West Maui NAR (HHP 1992e2, 1992e3; J. Lau, pers. comm., 1992). The Kaunohua Gulch population, numbering approximately eight individuals, is found within a fenced area of 5 to 10 sq m (55 to 110 sq ft) on

privately owned land (HHP 1992e3). The West Maui NAR population, consisting of 14 individuals, is located in the Lihau section at about 400 m (1,300 ft) elevation in lowland dry forest on State-owned land (HHP 1992e2; J. Lau, pers. comm., 1992). On East Maui, the known populations, which extend over a 6.25 sq km (2.4 sq mi) area, number no more than 20 individuals (HHP 1992e1, 1992e8; HPCC 1990c). These populations are near Puu o Kali between 249 and 440 m (800 and 1,450 ft) in elevation on State-owned land (HHP 1992e1, 1992e8). On the island of Hawaii, *Hibiscus brackenridgei* ssp. *brackenridgei* is known from two populations on State and private land: at Puu Anahulu Homesteads and Puu Huluhulu, approximately 3.5 km (2 mi) apart. These two populations contain no more than five individuals (HHP 1992e6, 1992e16).

Hibiscus brackenridgei ssp. *mokuleianus* is currently known from five populations, possibly containing as few as six to eight individuals. Undocumented observations of this taxon have been reported from Lihue and Olokele Canyon on Kauai (Bates 1990). On Oahu, *Hibiscus brackenridgei* ssp. *mokuleianus* was known historically from scattered locations in the Waianae Mountains (HHP 1992e18, 1992e21, 1992e22, 1992e24). These scattered populations occurred in the area from which this taxon is currently known. Scattered within this 12 by 5 km (7.5 by 3 mi) area extending from Puu Pane to Kealia-Kawaihapai are three current populations (1992e19, 1992e20, 1992e23, 1992e25; HPCC 1990d). The northernmost population, consisting of three individuals and occupying an area of 10 to 100 sq m (110 to 1,080 sq ft), is in the mountains south of the Dillingham Military Reservation at an elevation of 170 m (560 ft) on privately owned land (HHP 1992e25, HPCC 1990d). Another population is known from two adjuacent gulches between the Dupont Trail and Puu Iki at elevations between 120 and 240 m (400 and 800 ft) (HHP 1992e19, 1992e23). This population on privately owned land consists of 3 to 5 individuals in an area measuring not more than 0.25 sq km (0.1 sq mi) (HHP 1992e19, 1992e23). A population of *Hibiscus brackenridgei* ssp. *mokuleianus* reported from the Puu Pane area has not been seen for more than 40 years (HHP 1992e20).

Hibiscus brackenridgei occurs in lowland dry to mesic forest and shrubland from 130 to 800 m (425 to 2,625 ft) in elevation (Geesink *et al.* 1990; HHP 1992e1, 1992e4, 1992e5, 1992e8, 1992e14, 1992e19, 1992e25). Associated plant species include ààlii, alahèe, *Erythrina sandwicensis* (wiliwili), *Reynoldsia sandwicensis* (òhe), and *Sida fallax* (ilima) (HHP 1992e1 to 1992e3, 1992e6, 1992e8, 1992e20, 1992e23, 1992e25). The primary threats to this species are habitat degradation and possible predation by pigs, goats, axis deer, and cattle; competition with alien plant species; road construction; and stochastic extinction and/or reduced reproductive vigor due to the small number of existing individuals.

In 1931, the name *Cyperus pennatiformis* was published by Georg Kukenthal based on a specimen collected from Hana on Maui (Christophersen and Caum 1931). He also described a variety of the species, variety *bryanii*, for plants collected from the Northwestern Hawaiian Island of Laysan. Tetsuo Koyama recombined the species under the genus *Mariscus* and maintained the two subspecific taxa as subspecies (Wagner *et al.* 1989).

Mariscus pennatiformis, a member of the sedge family (Cyperaceae), is a perennial plant with a woody root system covered with brown scales. The stout, smooth, three-angled stems are between 0.4 and 1.2 m (1.3 and 4 ft) long, slightly concave and 3 to 7 mm (0.1 to 0.3 in) in diameter in the lower part. The three to five linear, somewhat leathery leaves are 8 to 17 mm (0.3 to 0.7 in) wide and at least as long as the stem. Each flower cluster, umbrella-shaped and moderately dense, is 4 to 15 cm (1.5 to 6 in) long and 5 to 25 cm (2 to 10 in) wide. About 5 to 18 spikes, comprised of numerous spikelets, form each cluster. Each spikelet, measuring about 8 to 14 mm (0.3 to 0.6 in) in length, is yellowish brown or grayish brown and is comprised of 8 to 25 densely arranged flowers. The glumes (bracts beneath each flower), which are less than twice as long as wide, are spreading and overlap tightly. The lowest glume does not overlap the base of the uppermost glume. This species differs from other members of the genus by its three-sided, slightly concave, smooth stems; the length and number of spikelets; the leaf width; and the length and diameter of stems. The two subspecies are distinguished primarily by larger and more numerous spikelets, larger achenes (dry, one-seeded fruits), and more overlapping and yellower glumes in ssp. *pennatiformis* as compared with ssp. *bryanii* (Koyama 1990).

Historically, *Mariscus pennatiformis* ssp. *pennatiformis* was known from five populations, located on Kauai at Halemanu in Kokee State Park, on Oahu in the Waianae Mountains on a ridge above Makaha Valley, on East Maui at Keanae Valley and Hana, and on the island of Hawaii at an unspecified location (HHP 1992f3 to 1992f6). *Mariscus pennatiformis* ssp. *pennatiformis* also exists in cultivation at the Maui Zoological and Botanical Gardens. The cultivated plants were originally from Nahiku, East Maui (J. Davis and R. Silva, in litt., 1978). It is not known whether the Nahiku population is still extant. The six current populations, with an unknown number of individuals, are at open sites in mesic forests and low elevation grasslands from sea level to 1,200 m (3,940 ft) in elevation. No historical locations are known for *Mariscus pennatiformis* ssp. *bryanii*. It is currently known only from federally managed Laysan Island, which is part of the Hawaiian Islands National Wildlife Refuge. This subspecies is found on the southeast end of the central lagoon, and the west and northeast sides of the island (HHP 1992f1, 1992f2; Koyama 1990). The 3 populations are found on sandy substrate at 5 m (16 ft) in elevation and number approximately 30 individuals (HHP 1992f1, 1992f2; Koyama 1990). Associated species include *Cyperus laevigatus* (makaloa), *Eragrostis variabilis* (kawelu), and *Ipomoea* sp. (HHP 1992f1, Koyama 1990). The small number of individuals and fewer than 10 known populations of *Mariscus pennatiformis* make the species vulnerable to stochastic extinction and/or reduced reproductive vigor.

Neraudia sericea was published by Gaudichaud in 1851 (Cowan 1949). In 1888, Hillebrand reduced it to a variety of *N. melastomaefolia* (*N. melastomaefolia* var. *sericea*). He also described a new species, *N. kahoolawensis*, named for a specimen collected by J.M. Lydgate on the island of Kahoolawe. In the most current treatment (Wagner *et al.* 1990), the reduction of *N. sericea* to a variety of *N. melastomaefolia* is not accepted and *N. kahoolawensis* is considered a Kahoolawe population of *N. sericea*.

Neraudia sericea, a member of the nettle family (Urticaceae), is a 3 to 5 m (10 to 16 ft) tall shrub with densely hairy branches. The elliptic or oval leaves are between 4.3 and 13 cm (1.7 and 5.1 in) long and have smooth margins or slightly toothed margins on young leaves. The upper leaf surface is moderately hairy and the lower leaf surface is densely covered with irregularly curved, silky gray to white hairs up to 1 mm (0.04 in) long along the veins. The male flowers may be stalkless or have short stalks. The female flowers are stalkless and have a densely hairy calyx that is either

toothed, collar-like, or divided into narrow unequal segments. The fruits are 1 mm (0.04 in) long achenes with the apical section separated from the basal portion by a deep constriction. Seeds are oval with a constriction across the upper half. *Neraudia sericea* differs from the other four closely related species of this endemic Hawaiian genus by the density, length, color, and posture of the hairs on the lower leaf surface and by its mostly entire leaf margins (Wagner *et al.* 1990).

Neraudia sericea was known historically from Kamalo and near Waianui on Molokai, from Kaiholena on central Lanai, Olowalu Valley on West Maui, the southern slopes of Haleakala on East Maui, and from an unspecified site on Kahoolawe (HHP 1992g1, 1992g3, 1992g4, 1992g6 to 1992g10). Currently, two populations of this species are known, from the slopes below Puu Kolekole on Molakai, specifically along the bottom and lower slopes of Makolelau Gulch, and from Pohadea Gulch on West Maui (HHP 1992g2, 1992g5, 1992g11). Both populations are on privately owned land. The Makolelau population contains an estimated 50 to 100 individuals growing in 'Ohi'a/'A'ali'i/ *Styphelia tameiameiae* (Pukiawe) Lowland Dry Shrubland in an area of over 100 sq m (1,080 sq ft) (HHP 1992g11). The population size of the Pohakea population is undetermined (HHP 1992g2). *Neraudia sericea* generally occurs in lowland dry to mesic shrubland or forest between 670 and 1,370 m (2,200 and 4,500 ft) in elevation (HHP 1992g3, 1992g10, 1992g11; Wagner *et al.* 1990). Other associated plant species include 'ilima, lama, *Bobea* ('ahakea), *Coprosma* (pilo), and *Hedyotis* (HHP 1992g11). The primary threats to *Neraudia sericea* are habitat degradation by feral pigs and goats; competition with the alien plant, *Melinus minutilfora* (molasses grass); and stochastic extinction and/or reduced reproductive vigor due to the small number of existing populations and individuals.

In 1826, Louis Charles Adelbert von Chamisso and D.F.L. Schlectendal described the species *Plantago princeps* (Rock 1920a). In 1829, *P. queleniana* was described by Gaudichaud. An additional species, *P. fauriei*, was described by H. Leveille (1911) from a specimen collected by Abbe Urbain Jean Faurie from Hanapepe Falls on Kauai. Several varieties and forms of *P. princeps* have also been described. The currently accepted classification places *P. queleniana* and *P. fauriei* in synonymy with *P. princeps* and recognizes only four varieties: *anomala*, *laxifolia*, *longibracteata*, and *princeps* (Gaudichaud 1829, Gray 1862, Hillbrand 1888, Mann 1867, Rock 1920a Wager *et al.* 1990, Wawra 1874).

Plantago princeps, a member of the plaintain family (Plantaginaceae), is a small shrub or robust perennial herb. Its erect or ascending stems are hollow, about 2 to 250 cm (1 to 100 in) long, and often branched with young internodes that are more or less woolly with reddish brown hairs. The oblong to elliptic, thick, leathery leaves are between 6 to 30 cm (2.4 and 12 in) long and up to 5 cm (2 in) wide and are tufted near the ends of stems. The leaves have smooth or minutely toothed margins, a pointed tip, and primary veins that converge at the base of the leaves. Numerous stalkless flowers are densely arranged in a cluster 11 to 28 cm (4.3 to 11 in) long with each cluster on a stalk 10 to 50 cm (4 to 20 in) long. Each flower spreads at an angle of nearly 90 degrees to the axis of the stalk or grows upright. The sepals are somewhat distinct and elliptic in shape. The fruits are capsules that contain three or four tiny black seeds; the surface of the seeds is apparently covered with a sticky membrane. This species differs from other native members of the genus in Hawaii by its large branched stems, flowers at nearly right angles to the axis of the flower cluster, and fruits that break open at a point two-thirds from the base. The four varieties (*anomala*, *laxiflora*, *longibracteata*, and *princeps*) are distinguished by the branching and pubescence of the stems; the size, pubescence, and venation of the leaves; the density of the inflorescence; and the orientation of the flowers (Wagner *et al.* 1990).

The four varieties of *Plantago princeps* were historically found on five islands, and now occur on Kauai, Oahu, Molokai, and Maui. A total of 18 populations containing approximately 300 to 1,200 individuals is currently known. The four varieties are discussed separately below. Historically, *Plantago princeps* var. *anomala* was known from Makaleha in the Waianae Mountains on Oahu, and ridge west of Hanapepe River on Kauai (HHP 1992i1, 1992i4). Currently on Kauai, 4 populations with 45 individuals are known from the south rim and upper reaches of Kalalau Valley on State land (HHP 1992i2; HPCC 1990e, 1990g, 1991g). Historically, *Plantago princeps* var. *laxiflora* was known from Waikolu, Olokui, Kamakou, and Pelekunu on the east side of Molokai; in back of Lahaina on West Maui; and Hamakua and Kohala on Hawaii Island (HHP 1992i6, 1992i8 to 1992i11, 1992i16, 1992i17). Currently on Molokai, *Plantago princeps* var. *laxiflora* is known from one population with five individuals at Kawela Gulch on private land (HHP 1992i5). On Maui, it is known from 2 locations in Iao Valley on West Maui, and 4 locations within Haleakala National Park and adjacent Waikamoi Preserve on East Maui on Federal and private land, totalling about 100 plants on that island (HHP 1992i7, 1992i12 to 1992i15, 1992i18; HPCC 1990h to 1990j, 1991h, 1991i).

Plantago princeps var. *longibracteata* was historically known from Hanalei, the Wahiawa Mountains, and Hanapepe Falls on Kauai, and from Kaala and the Koolauloa Mountains on Oahu (HHP 1992i19, 1992i21, 1992i23, 1992i24, 1992i26). Currently, 2 populations are known from Kauai at Waioli Valley and Waialeale on State land; they are estimated to contain between 130 and more than 1,000 individuals (HHP 1992i25, 1992i27). On Oahu, two populations approximately 3.5 km (2.2 mi) apart are known from the Poamoho area on private and State land; the number of individuals is not known (HHP 1992i20, 1992i22). Historically, *Plantago princeps* var. *princeps* was known from Nuuanu Pali and Kalihi in the Koolau Mountains of Oahu (HHP 1992i28 to 1992i30). Three current populations of this taxon are known from Mount Tantalus in the Koolau Mountains and from North Palawai and Ekahanui gulches in the Waianae Mountains of Oahu. Between 16 and 20 individuals are known from the Waianae Mountains. The number of individuals at the Koolau site is not known, as it was last observed in 1948 (HHP 1992i3, 1992i28 to 1992i31; HPCC 1990f; J. Lau, pers. comm., 1992).

Plantago princeps is typically found on steep slopes, rock walls, or at bases of waterfalls from 480 to about 1,100 m (1,580 to 3,600 ft) in elevation (Wagner *et al.* 1990). Associated plant species include 'a'ali'i, kopiko, 'ohi'a, uluhe, and *Dubautia plantaginea* (HHP 1992i28, HPCC 1990e to 1990i, 1990k, 1991g to 1991i). The primary threats to *Plantago princeps* are habitat degradation by ungulates (pigs and goats) and competition with various alien plant species.

Sesbania tomentosa was first described by W.J. Hooker and G.A.W. Arnott in 1836 from collections from Oahu (Degener 1937); it was named for its silvery hairs. In 1920, Joseph F. Rock described an arborescent form of the species (*S. tomentosa* f. *arborea*) based on a Molokai specimen. Degener and Sherff (Sherff 1949) published a new variety, var. *molokaiensis*, based on plants from West Molokai. Nearly 30

years later, Otto and Isa Degener elevated that variety to the specific level (Degener and Degener 1978). At that time, the Degeners also described two new species, *S. hawaiiensis* and *S. hobdyi*. In the currently accepted classification by Geesink and others (1990), *S. arborea*, *S. hawaiiensis*, *S. hobdyi*, and *S. molokaiensis* are synonymized with *S. tomentosa*. However, they note that the arborescent form of the species found on the island of Molokai probably merits formal taxonomic recognition.

Sesbania tomentosa, a member of the pea family (Fabaceae), is typically a sprawling shrub with branches up to 14 m (45 ft) long but may also be a small tree up to 6 m (20 ft) in height. Each compound leaf is comprised of 18 to 38 oblong to elliptic leaflets, each 15 to 38 mm (0.6 to 1.5 in) long and 5 to 18 mm (0.2 to 0.7 in) wide, and is usually sparsely to densely covered with silky hairs. The flowers, in clusters of two to nine, are salmon tinged with yellow, orange-red, or scarlet, or rarely pure yellow. The petals are between 23 and 45 mm (0.9 and 1.8 in) long, the upper pair sometimes of a lighter color than the other petals. The calyx is about 7 to 12 mm (0.3 to 0.5 in) long. Fruits are slightly flattened pods 7 to 23 cm (2.8 to 9 in) long and about 5 mm (0.2 in) wide that contain about 6 to 27 olive to pale or dark brown, oblong seeds. *Sesbania tomentosa* is the only endemic Hawaiian species in the genus, differing from the naturalized *S. sesban* by the color of the flowers, the longer petals and calyx, and the number of seeds per pod (Geesink *et al.* 1990).

On Molokai, *Sesbania tomentosa* was known historically from Mahana on Mauna Loa, in the vicinity of the coast near Waiahewahewa Gulch, and on Molokai's west coast at Laau and Ilio Points (HHP 1992j16, 1992j18, 1992j23, 1992j26, 1992j37). On Oahu, *Sesbania tomentosa* was known historically from eastern Oahu at Ulupau Crater, and on the islets of Kaohikaipu and Mokulua (HHP 1992j3, 1992j6, 1992j34). This taxon was also known historically from western Oahu at an unspecified location along the Waianae coast (HHP 1992j10). On Lanai, *Sesbania tomentosa* was known historically from scattered locations on the south half of the island and on the east slope of the island at Kahinahina (HHP 1992j5, 1992j19 to 1992j22, 1992j42). *Sesbania tomentosa* was also known historically from an unspecified location on Kahoolawe (HHP 1992j24).

Currently, there are two populations of *Sesbania tomentosa* in the Northwestern Hawaiian Islands (HHP 1992j35, 1992j36). One population is on the island of Nihoa, which comprises 0.8 sq km (0.3 sq mi) and is under U.S. Fish and Wildlife Service management as part of the Hawaiian Islands National Wildlife Refuge (Dept. of Geography 1983, HHP 1992j35). The Nihoa plants have been described as relatively common in some areas, with several thousand individuals known (HHP 1992j35). Another population is known from Necker Island, which is only 0.2 sq km (0.1 sq mi) in area, and like Nihoa is managed by the U.S. Fish and Wildlife Service as part of the Hawaiian Islands National Wildlife Refuge (HHP 1992j36). Although there are no population estimates for Necker Island, *Sesbania tomentosa* is known to occur from 45 m (150 ft) elevation to the summit, growing on the tops of all hills of the main island with a few individuals found on the Northwest Cape (HHP 1992j36). On the privately owned island of Niihau, *Sesbania tomentosa* is known from the south tip of the island at the headland west of Kaumuhonu Bay. The size of this population has not been determined; in 1947 at least one collection was made at an elevation of 50 m (160 ft) (HHP 1992j14).

On Kauai, *Sesbania tomentosa* is found between Mana town and Mana Point and at Polihale State Park (HHP 1992j15, 1992j33; HPCC 1991L). The population on State-owned land at Polihale State Park consists of about 30 individuals growing in a lithified dune area at approximately 12 m (40 ft) elevation in an area of approximately 10 to 50 sq m (110 to 540 sq ft) (HHP 1992j33). The second population is approximately 6 km (4 mi) southwest of the Polihale State Park population, growing alongside a pond owned by the State (HHP 1992j15). The size of the population has not been determined. On Oahu, *Sesbania tomentosa* is currently known from one population of 50 to 100 individuals on State-owned land at Kaena Point (HHP 1992j1, 1992j2). This population is primarily within the Kaena Point NAR, growing in sand dunes in a Naupaka kahakai Mixed Coastal Dry Shrubland (HHP 1992j1, 1992j2; HPCC 1990o). However, scattered individuals are also located to the east for about 3.5 km (2.25 mi) along the north coast (HHP 1992j1, 1992j2; Woodward *et al.* 1991).

On Molokai, *Sesbania tomentosa* is known from the south slopes of central Molokai from Kamiloloa to Makolelau and along Molokai's northwest coast from Moomomi to east of Hinanaulua. The 4 populations on private and State-owned land from Kamiloloa to Makolelau total fewer than 2,000 individuals and grow in a 7 by 3 km (4.5 by 2 mi) area (HHP 1992j11, 1992j13, 1992j25, 1992j27; HPCC 1990m, 1990n). The 3 populations from Moomomi to east of Hinanaulua consist of about 100 to 150 plants growing on State and private land from sea level to 60 m (200 ft) elevation in a 5 by 1 km (3 by 0.5 mi) area (HHP 1992j12, 1992j28, 1992j49; HPCC 1990L). On Lanai, *Sesbania tomentosa* is now restricted to the northern slopes of the island. This cluster of 3 populations between Paomai and Maunalei is on privately owned land and includes at least 12 individuals growing on arid slopes (HHP 1992j17, 1992j38, 1992j39).

On Maui, *Sesbania tomentosa* is only known from two areas on West Maui. One plant is on State-owned land below Lihau Peak (HHP 1992j30). *Sesbania tomentosa* also occurs on a 6 km (4 mi) stretch of the northeast coast of West Maui, from the lighthouse near Nakalele Point to Puu Kahulianapa (HHP 1992j31, 1992j32, 1992j43, 1992j48; HPCC 1991m). This cluster of 4 populations contains an estimated 50 to 75 individuals on land owned by the State, the County of Maui, and private individuals (HHP 1992j31, 1992j32, 1992j43, 1992j48; R. Hobdy, pers. comm., 1992). Off the south central coast of Kahoolawe, approximately 25 to 30 individuals of *Sesbania tomentosa* are found on the sparsely vegetated islet of Puu Koae, which is a State-owned seabird sanctuary (HHP 1992j29).

On the island of Hawaii, *Sesbania tomentosa* is known from two regions of the southeast coast. It occurs along 13 km (8 mi) of coastline between Ka Lae and Kaalualu. This cluster of populations on State-owned land contains an estimated 250 individuals growing between sea level and 25 m (80 ft) elevation, with some populations occurring in 'Ilima Coastal Dry Shrubland (HHP 1992j7, 1992j9, 1992j44, 1992j45, 1992j50; HPCC 1991j, 1991k). The second cluster is in Hawaii Volcanoes National Park and consists of scattered populations within a 19 by 8 km (12 by 5 mi) area from above Kukalauula Pali to Kahue, at elevations between 10 and 850 m (30 and 2,800 ft). This cluster of populations on federally owned land contains at least 10 individuals (HHP 1992j4, 1992j8, 1992j40, 1992j41, 1992j46, 1992j47). The currrently known populations of *Sesbania tomentosa* on the 8 main Hawaiian islands (Niihau, Kauai, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii) contain an estimated 2,000 to 3,000 individuals. In the Northwestern Hawaiian Islands, the largest population occurs on Nihoa and consists of several thousand individuals (HHP 1992j35).

Sesbania tomentosa is found on sandy beaches, dunes, soil pockets on lava, and along pond margins (Geesink *et al.* 1990). It commonly occurs in coastal dry shrublands and grasslands, but is also known from open 'ohi'a forests and Mixed Coastal Dry Cliffs (HHP 1992j2, 1992j4, 1992j5, 1992j7, 1992j14, 1992j27, 1992j28, 1992j35, 1992j49). Associated plant species include 'ilima, naupaka kahakai, *Heteropogon contortus* (pili), *Myoporum sandwicense* (naio), and *Sporobolus virginicus* ('aki 'aki) (HHP 1992j1, 1992j2, 1992j7, 1992j8, 1992j12, 1992j13, 1992j25, 1992j28, 1992j31, 1992j33, 1992j40, 1992j45, 1992j49, 1992j50). The primary threats of *Sesbania tomentosa* are habitat degradation caused by axis deer and cattle, competition with various alien plant species, fire, and destruction by off-road vehicles.

A specimen collected by David Nelson in 1779 from the island of Hawaii was described and named *Solanum incompletum* by Dunal (1852). In 1888, Hillebrand described two varieties of the species: var. *glabratum* and var. *mauiense*. In 1969, Harold St. John described the species *S. haleakalaense* based on a specimen collected by Hillebrand on the south slope of Haleakala on Maui. In the latest treatment, *S. haleakalaense* was synonymized with *S. incompletum* and no subspecific taxa of *S. incompletum* were recognized (Symon 1990).

Solanum incompletum, a member of the nightshade family (Solanaceae), is a woody shrub up to 3 m (10 ft) tall. Its stems and lower leaf surfaces are covered with prominent reddish prickles about 4 mm (0.2 in) long or sometimes with yellow fuzzy hairs on young plant parts and lower leaf surfaces. The oval to elliptic leaves, 10 to 15 cm (4 to 6 in) long and about 7 cm (2.8 in) wide, have prominent veins on the lower surface, and are on stalks up to 7 cm (2.8 in) long. The leaf margins are lobed with one to four lobes on each side. Numerous flowers grow in loose branching clusters with each flower on a stalk about 9 mm (0.4 in) long. The calyx and flowers generally lack prickles. The white petals form a star-shaped corla about 2 cm (0.8 in) in diameter. The curved anthers, about 2 mm (0.08 in) long, top short filaments that do not extend beyond the petals. Fruits are round berries about 1.5 cm (0.6 in) in diameter that mature from yellow-orange to black. This species differs from others in the genus by being generally prickly and having loosely clustered while flowers, curved anthers about 2 mm (0.08 in) long, and berries 1 to 2 cm (0.4 to 0.8 in) in diameter (Symon 1990).

Historically, *Solanum incompletum* was known from central and northeastern Lanai and from scattered locations on Maui (HHP 1992k1, 1992k2, 1992k4, 1992k10 to 1992k13; Symon 1990). According to David Symon (1990), the known distribution of *Solanum incompletum* also extends to the islands of Kauai and Molokai. On the island of Hawaii, *Solanum incompletum* was known historically from the Kohala Mountains, Kona, Puu Waawaa, Puu Ikaaka Crater, and Omaokoili (HHP1992k3, 1992k5, 1992k7 to 1992k9). The single remaining known population is from the island of Hawaii; it has not been seen for more than 40 years. This population is on State-owned land at Puu Huluhulu and consists of perhaps two individuals at an approximate elevation of 2,040 m (6,700 ft) (HHP 1992k6). Associated species include naio, *Acacia koa* (koa), and *Sophora chrysophylla* (mamane in dry mesic forest, diverse mesic forest, and subalpine forest at elevations from 300 to 2,040 m (1,000 to 6,700 ft) (HHP 1992k1, 1992k6; Symon 1990; J. Lau, Pers. comm., 1992). The primary threats to the last remaining individuals of *Solanum incompletum* are stochastic extinction and reduced reproductive vigor due to the extremely small number of existing plants, and competition with the alien plant *Senecio mikanioides* (German ivy).

Spermolepis hawaiiensis was first described by H. Wolff in 1921. In the past, this Hawaiian species had been confused with the European plants *Apium echinatum* and *Caucalis daucoides* (Constance and Affolter 1990, Wolff 1921).

Spermolepis hawaiiensis, a member of the parsley family (Apiaceae), is a slender annual herb with few branches that grows to a height of 5 to 20 cm (2 to 8 in). Its leaves, dissected into narrow, lance-shaped divisions, are oblong to somewhat oval in outline and grow on stalks about 2.5 cm (1 in) long. Flowers are arranged in a loose, compound umbrella-shaped inflorescence arising from the stem, opposite the leaves. Each cluster consists of two to six flowers, with each flower on a stalk between 2 and 6 mm (0.08 and 0.2 in) long. The calyx is lacking in this species, but one to five bracts grow below the clusters of flowers. The fruits are oval and laterally compressed and constricted at the line where the two halves of the fruit meet. The fruits are 4 mm (0.2 in) long and 3 mm (0.1 in) wide, covered with curved bristles, and contain seeds that are marked with longitudinal grooves beneath oil tubes that are characteristic of the parsley family. *Spermolepis hawaiiensis* is the only member of the genus native to Hawaii. It is distinguished from other native members of the family by being a non-succulent annual with an umbrella-shaped inflorescence (Constance and Affolter 1990).

Historically, *Spermolepis hawaiiensis* was known from Waimea on Kauai, Koko Head on Oahu, and Paomai and Kahinahina on Lanai (HHP 1992L3 to 1992L5, 1992L8). Currently, a total of six populations is known on Oahu, Molokai, Lanai, and West Maui; one additional population may exist on Hawaii. On Oahu, on State land at Diamond Head (land leased to the Department of Defense at the Diamond Head Reservation), 10 plants were observed in 1992 during the dry season. In 1988, when the site was first visited, thousands of plants were seen over an area less than 50 sq m (several hundred sq ft) (Wayne Takeuchi, DOFAW, pers. comm., 1992). The population fluctuations probably reflect seasonal changes in precipitation. On Molokai, about 600 plants were reported from Kamalo on private land within an area of less than 400 sq m (0.1 ac) (HHP 1992L6). On Lanai, 2 populations of *S. hawaiiensis* are known on private land: one at Kapoho with 100 individuals and one west of Puu Manu with 50 to 100 individuals covering an area of about 0.1 ha (0.25 ac) (HHP 1992L7; R. Hobdy, pers. comm., 1992). On West Maui, 3 populations are known on State land: one in the Lihau section of the West Maui NAR, with 60 to 100 individuals within an area of about 0.4 ha (1 ac); one further east in the Lihau section of the West Maui NAR, with several hundred plants scattered over a distance of 0.7 km (0.4 mi); and one above Lahainaluna School, with several hundred individuals spread over an area of about 0.4 ha (1 ac) (HHP 1992L1, 1992L2; HPCC 1991n). On the island of Hawaii, a collection of *Spermolepis hawaiiensis* was made at an unspecified location in 1943; it is not known whether this population still exists (HHP 1992L9).

Spermolepis hawaiiensis is known from various vegetation types, including 'ohi'a forests, 'A'ali'i Lowland Dry Shrubland, cultivated fields, and pastures between about 300 and 600 m (1,000 and 2,000 ft) in elevation (HHP 1992L2, 1992L8, 1992L9; HPCC 1991n). Associated plant species include 'ilima, *Doryopteris* sp., *Gouania hillebrandii*, and the alien plant *Leucaena leucocephala* (koa haole) (HHP 1991L1). The primary threats to *Spermolepis hawaiiensis* are habitat degradation by axis deer; competition with the alien

plant koa haole; and stochastic extinction and reduced reproductive vigor due to the small number of existing populations.

Vigna o-wahuensis was described by T. Vogel in 1836 from a specimen from the Waianae Mountains of Oahu (Gray 1854). In 1854, Gray described another species, *Vigna sandwicensis*, for which Rock later designated two varieties: var. *heterophylla* and var. *sandwicensis* (Rock 1920b). The currently accepted treatment places *V. sandwicensis* in synonymy under *V. o-wahuensis* (Geesink *et al.* 1990).

Vigna o-wahuensis, a member of the pea family, is a slender twining annual or perennial herb with fuzzy stems that grows to 0.4 m (1.3 ft) in length. Each leaf is made up of three leaflets which vary in shape from round to linear, are 1.2 to 8 cm (0.5 to 3 in) long and 0.1 to 2.5 cm (0.04 to 1 in) wide, and are sparsely or moderately covered with coarse hairs. Flowers, in clusters of one to four, have thin, translucent, pale yellow or greenish yellow petals about 2 to 2.5 cm (0.8 to 1 in) long. The two lowermost petals are fused and appear distinctly beaked. The sparsely hairy calyx is 4 to 8 mm (0.2 to 0.3 in) long with asymmetrical lobes that measure about 3 mm (0.1 in) long. The fruits are long slender pods 4 to 9 cm (1.6 to 3.5 in) long and about 5 mm (0.2 in) wide that may or may not be slightly inflated and contain 7 to 15 gray to black seeds less than 6 mm (0.2 in) long. This species differs from others in the genus by its thin yellowish petals, sparsely hairy calyx, and thin pods which may or may not be slightly inflated (Geesink *et al.* 1990).

Historically, *Vigna o-wahuensis* was known from Niihau and from an unspecified location on Kauai (HHP 1992m10, 1992m16). On Oahu, this taxon was known from between Waimanalo and Makapuu Point, the Mokulua Islets, and the Waianae Mountains (HHP 1992m13 to 1992m15, 1992m20). On Maui, *Vigna o-wahuensis* was known from an unspecified site on West Maui and from Makawao, Waiakoa, and Haleakala on East Maui (HHP 1992m2 to 1992m4, 1992m25). There are no currently known populations on Niihau, Kauai, Oahu, or Maui. On Molokai, *Vigna o-wahuensis* was known historically from the western end of the island in the vicinity of Ilio Point (HHP 1992m18). On Lanai, this species occurred historically at scattered locations across the island's southern half (HHP 1992m5, 1992m6, 1992m8, 1992m9, 1992m17). And on the island of Hawaii, this taxon was known from Mauna Loa and Kau at unspecified sites (HHP 1992m1, 1992m19, 1992m24).

Currently, a total of fewer than 100 individuals of *Vigna o-wahuensis* is known from 7 populations on the islands of Molokai, Lanai, Kahoolawe, and Hawaii (HHP 1992m11, 1992m12, 1992m21 to 1992m23; HPCC 1991o; J. Lau, pers. comm., 1992). On Molokai are two populations separated by a distance of 4 km (2.5 mi). One population, south of Onini Gulch at about 850 m (2,800 ft) elevation on privately owned land, covers an area of 18 sq m (200 sq ft) in a forestry planting of *Fraxinus uhdei* (tropical ash) and *Pinus* (pine) (HHP 1992m11). The other Molokai population of about 10 individuals is on privately owned land at Makolelau (J. Lau, pers. comm., 1992). On Lanai, at least one individual of *Vigna o-wahuensis* is known from the arid windward slopes northeast of Kanepuu above Lapaiki at about 370 m (1,200 ft) elevation on privately owned land (HHP 1992m7, 1992m23). On the federally owned island of Kahoolawe, *Vigna o-wahuensis* grows between Makaalae and Lua Kealialalo at 140 m (460 ft) elevation, near the summit at about 400 m (1,300 ft) elevation, and about 0.8 km (0.5 mi) south of Hanakanaea near "Sailor's Hat" (HHP 1992m21, 1992m23; J. Lau, pers. comm., 1992). Only one individual is known from the population between Makaalae and Lua Kealialalo in pili grassland (J. Lau, pers. comm., 1992). Near the summit, about 20 plants grow in a 9 sq m (100 sq ft) area with a few more plants scattered nearby (HHP 1992m22). The size of the population south of Hanakanaea has not been determined, but at least one collection has been made recently (HHP 1992m21). On the island of Hawaii, *Vigna o-wahuensis* is known only from Nohonaohae Cinder Cone on privately owned land. Ten plants are known from 'A'ali'i Lowland Dry Shrubland within an enclosure containing pasture grass (HHP 1992m12, HPCC 1991o).

Vigna o-wahuensis occurs in dry to mesic grassland and shrubland from 10 to 1,370 m (30 to 4,500 ft) in elevation (Geesink *et al.* 1990; HHP 1992m1 to 1992m3, 1992m5, 1992m11, 1992m12, 1992m15, 1992m22, 1992m24). Other associated plant species include 'ilima, *Chenopodium* ('aheahea), *Dubautia menziesii*, and *Osteomeles anthyllidifolia* (ulei) (HHP 1992m11, 1992m12, 1992m23; HPCC 1991o). The primary threats to *Vigna o-wahuensis* are habitat degradation by ungulates (pigs and axis deer), competition with various alien plant species, fire, and stochastic extinction and/or reduced reproductive vigor due to the small number of existing populations and individuals.

Previous Federal Action

Federal action on these plants began as a result of section 12 of the Act, which directed the Secretary of the Smithsonian Institution to prepare a report on plants considered to be endangered, threatened,or extinct in the United States. This report, designated as House Document No. 94–51, was presented to Congress on January 9, 1975. In that document, *Adenophorus periens, Bonamia menziesii, Flueggea neowawraea* (as *Drypetes phyllanthoides*), *Hibiscus brackenridgei* (as *H. b.* var. *brackenridgei*, var. *mokuleianus*, and var. "from Hawaii"), *Neraudia sericea, Plantago princeps* (as *P. p.* var. *elata*, var. *laxifolia*, and var. *princeps*), *Sesbania tomentosa* (as *S. t.* var. *tomentosa*), *Solanum incompletum* (as *S. i.* var. *glabratum*, var. *incompletum*, and var. *mauiensis*), and *Vigna o-wahuensis* (also as *V. sandwicensis* var. *heterophylla* and *V. s.* var. *sandwicensis*) were considered to be endangered. *Diellia erecta* and *Plantago princeps* (as *P. p.* var. *acaulis*, var. *denticulata*, and var. *queleniana*) were considered to be threatened, and *Neraudia sericea* (as *N. kahoolawensis*) and *Solanum incompletum* (as *S. haleakalense*) were considered to be extinct.

On July 1, 1975, the Service published a notice in the **Federal Register** (40 FR 27823) of its acceptance of the Smithsonian report as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act, and giving notice of its intention to review the status of the plant taxa named therein. As a result of that review, on June 16, 1976, the Service published a proposed rule in the **Federal Register** (41 FR 24523) to determine endangered status pursuant to section 4 of the Act for approximately 1,700 vascular plant species, including all of the above taxa considered to be endangered or thought to be extinct, plus *Diellia erecta* (considered threatened). The list of 1,700 plant taxa was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94–51 and the July 1, 1975, **Federal Register** publication.

General comments received in response to the 1976 proposal are summarized in an April 26, 1978, **Federal Register** publication (43 FR 17909). In 1978, amendments to the Act required that all proposals over 2 years old be withdrawn. A 1-year grace period was given to proposals already over 2 years old. On December 10, 1979, the

Service published a notice in the Federal Register (44 FR 70796) withdrawing the portion of the June 16, 1976, proposal that had not been made final, along with four other proposals that had expired. The Service published updated notices of review for plants on December 15, 1980 (45 FR 82479), September 27, 1985 (50 FR 39525), and February 21, 1990 (55 FR 6183). In these notices, 11 of the taxa (including synonymous taxa) that had been in the 1976 proposed rule were treated as Category 1 candidates for Federal listing. Category 1 taxa are those for which the Service has on file substantial information on biological vulnerability and threats to support preparation of listing proposals. Other than *Mariscus pennatiformis*, *Neraudia sericea* (as *N. kahoolawensis*), *Plantago princeps* (as *P. p.* var. *acaulis* and var. *queleniana*), *Sesbania tomentosa* as *S. hobdyi*), *Solanum incompletum* (as *S. haleakalense*), and *Spermolepis hawaiiensis*, all the aforementioned taxa that were proposed as endangered in the June 16, 1976, proposed rule were considered Category 1 candidates on all three notices of review. *Flueggea neowawraea* appeared as *Neowawraea phyllanthoides* on the 1980 and 1985 notices. In the 1980 and 1985 notices, *Sesbania tomentosa* (as *S. hobdyi*) and *Solanum incompletum* (as *S. haleakalense*) were considered Category 1* species. Category 1* species are those which are possibly extinct. *Plantago princeps* (as *P. p.* var. *acaulis* and var. *queleniana*) appeared as a Category 2 taxon and *Neraudia sericea* (as *N. kahoolawensis*) as a Category 3A species in the 1980 and 1985 notices. Category 2 taxa are those for which there is some evidence of vulnerability, but for which there are not enough data to support listing proposals at the time. Category 3A taxa are those for which the Service has persuasive evidence of extinction. Through taxonomic revisions, each of the Category 1*, 2, and 3A taxa were synonymized under Category 1 taxa on the 1990 list. *Mariscus pennatiformis* (as *Cyperus p.* var. *bryanii*) first appeared on the 1985 notice of review as a Category 1 taxon. *Spermolepis, hawaiiensis* first appeared on the 1990 notice of review as a Category 1 species after it was rediscovered in 1986.

Section 4(b)(3)(B) of the Act requires the Secretary to make findings on certain pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments further requires all petitions pending on October 13, 1983, be treated as having been newly submitted on that date. On October 13, 1983, the Service found that the petitioned listing of these species was warranted, but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act; notification of this finding was published on January 20, 1984 (49 FR 2485). Such a finding requires the petition to be recycled, pursuant to section 4(b)(3)(C)(i) of the Act. The finding was reviewed in October of 1984, 1985, 1986, 1987, 1988, 1989, 1990, and 1991. Publication of the present proposal constitutes the final 1-year finding for these species.

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act (16 U.S.C. 1533) and regulations (50 CFR part 424) promulgated to implement the Act set forth the procedures for adding species to the Federal Lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). The threats facing these 12 species are summarized in Table 2.

TABLE 2.—SUMMARY OF THREATS

Species	Feral animal activity				Alien plants	Fire	Human impacts	Insects	Limited numbers*
	Pigs	Goats	Deer	Cattle					
Adenophorus periens	X				X	X			
Bonamia menziesii	X	X	X	X	X	X			
Diellia erecta	X	X		X	X				X[1]
Flueggea neowawraea	X	X	X	X	X	X		X	
Hibiscus brackenridgei	X	X	X	X	X		X		X[1]
Mariscus pennatiformis									X[1,2]
Neraudia sericea	X	X			X				X[1,2]
Plantago princeps	X	X			X				
Sesbania tomentosa			X	X	X	X	X		
Solanum incompletum					X				X[2,3]
Spermolepis hawaiiensis			X		X				X[2]
Vigna o-wahuensis	X		X		X	X			X[1,2]

*No more than 100 individuals and/or fewer than 10 populations.
[1] No more than 100 individuals.
[2] Fewer than 10 populations.
[3] No more than 10 individuals.

These factors and their application to *Adenophorus periens* L.E. Bishop (pendant kihi fern), *Bonamia menziesii* A. Gray (no common name (NCN)), *Diellia erecta* Brack. (NCN), *Flueggea neowawraea* W. Hayden (mehamehame), *Hibiscus brackenridgei* A. Gray (mào hau hele), *Mariscus pennatiformis* (Kekunth.) T. Koyama (NCN), *Neraudia sericea* Gaud. (NCN), *Plantago princeps* Cham. and Schlechtend. (laukahi kuahiwi), *Sesbania tomentosa* Hook. and Arnott ('ohai), *Solanum incompletum* Dunal (popolo ku mai), *Spermolepis hawaiiensis* Wolff (NCN), and *Vigna o-wahuensis* Vogel (NCN) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Native vegetation on all of the main Hawaiian Islands has undergone extreme alteration because of past and present land management practices including ranching, deliberate alien animal and plant introductions, and agricultural development (Cuddihy and Stone 1990, Wagner *et al.* 1985). The Northwestern Hawaiian Islands have undergone similar alteration, but to a lesser degree. The primary threats facing the 12 plant species proposed for listing are ongoing and threatened destruction and adverse modification of habitat by feral animals and competition with alien plants.

Ten of the 12 proposed species are variously threatened by feral animals (see Table 2). Animals such as pigs,

goats, axis deer, black-tailed deer, and cattle were introduced either by the early Hawaiians (pigs) or more recently by European settlers (all ungulate species) for food and/or commercial ranching activities. Over the 200 years following their introduction, their numbers increased and the adverse impacts of feral ungulates on native vegetation have become increasingly apparent. Beyond the direct effect of trampling and grazing native plants, feral ungulates have contributed significantly to the heavy erosion still taking place on most of the main Hawaiian islands.

Pigs (*Sus scrofa*), originally native to Europe, Africa, and Asia, were introduced to Hawaii by the Polynesian ancestors of Hawaiians, and later by western immigrants. The pigs escaped domestication and invaded primarily wet and mesic forests and grasslands of Kauai, Oahu, Molokai, Maui, and Hawaii. They presently threaten the existence of at least eight of the proposed plant species in those habitats. While foraging, pigs root and trample the forest floor, encouraging the establishment of alien plants in the newly disturbed soil. Pigs also disseminate alien plant seeds through their feces and on their bodies, accelerating the spread of alien plants through native forest (Cuddihy and Stone 1990, Stone 1985). On Kauai, three populations each of *Adenophorus periens* and *Flueggea neowawraea* and a single population each of *Plantago princeps* var. *anomala* and *P. p.* var. *longibracteata* have sustained loss of individual plants and/or habitat as a result of feral pig activities (HHP 1992d18, 1992i2; J. Lau, pers. comm., 1992). The following numbers of populations of proposed plants on Oahu are threatened by pigs: 4 populations of *Bonamia menziesii*, 15 of *Flueggea neowawraea*, 1 of *Hibiscus brackenridgei* ssp. *mokuleianus*, and 2 populations each of *Plantago princeps* var. *longibracteata* and *P. p.* var. *princeps*. On Molokai, one population each of *Diellia erecta*, *Plantago princeps* var. *laxiflora*, and *Vigna o-wahuensis*, and two populations of *Neraudia sericea* are also threatened by pigs. On East Maui, pigs are destroying the habitat of three populations of *Plantago princeps* var. *laxiflora* (HHP 1992i12; J. Lau, pers. comm., 1992). On the island of Hawaii, feral pigs are a major threat to proposed species at the following locations: In Kahaualea NAR, Olaa Tract, and 2.4 km (1.5 mi) northwest of Puu Kauka, where at least three populations of *Adenophorus periens* occur; and in the regions of Manuka and Honomalino in the South Kona District, where one or more populations of *Diellia erecta* and *Flueggea neowawraea* remain (J. Lau, pers. comm., 1992).

Goats (*Capra hircus*), native to the Middle East and India, were first successfully introduced to the Hawaiian Islands in 1792. Feral goats now occupy a wide variety of habitats from lowland dry forests to montane grasslands on Kauai, Oahu, Molokai, Maui, and Hawaii, where they consume native vegetation, trample roots and seedlings, accelerate erosion, and promote the invasion of alien plants (Stone 1985, van Riper and van Riper 1982). Goats are significantly degrading the habitat of at least five species proposed in this rule. On Kauai, goats contribute to the substantial decline of one population of *Bonamia menziesii*, four populations of *Flueggea neowawraea*, and one population of *Plantago princeps* var. *anomala* (HHP 1992d18, 1992d30, 1992d31, 1992i2; J. Lau, pers. comm., 1992). On Oahu, encroaching urbanization and hunting pressure tend to concentrate the goat population in the dry upper slopes of the Waianae Mountains, where one population of *Bonamia menziesii* and two populations of *Flueggea neowawraea* exist (HHP 1992d15; J. Lau, pers. comm., 1992). The goat population in the Waianae area is apparently increasing, becoming an even greater threat to the rare plants that grow there. On Molokai, two populations of *Diellia erecta* in Halawa Valley and Puu Kolekole and one population of *Neraudia sericea* at Makolelau are presently threatened by goats (HHP 1992c12, 1992c13; J. Lau, pers. comm., 1992). Until a few years ago, feral goats were a major threat to rare plants in Haleakala National Park on East Maui, but because of an active ungulate control program, the goat population was reduced to 100 by 1988. While they are no longer a significant threat, the future ingress and reestablishment of goats are still a possibility (Lloyd Loope, National Park Service, pers. comm., 1992) and could potentially affect the three populations of *Plantago princeps* var *Laxiflora* found in the park (J. Lau, pers. comm., 1992).

Eight individuals of axis deer (*Axis axis*), introduced to the island of Molokai in 1868, increased to thousands of animals within about 30 years (Tomich 1986). By the turn of the century, the herds so damaged the vegetation of Molokai that professional hunters were hired to control their numbers (Tomich 1986). By then, the native vegetation had suffered irreparable damage from overgrazing by axis deer. They degrade the habitat by trampling and overgrazing vegetation, which removes ground cover and exposes the soil to erosion (J. Lau, pers. comm., 1992). Activity of deer on Molokai has resulted in loss of habitat and/or individuals of at least five of the proposed species. On both Molokai and Lanai, the axis deer population is presently actively managed for recreational hunting by the State Department of Land and Natural Resources. Extensive red erosional scars caused by decades of deer activity are evident on Lanai. The habitat of three Lanai populations of *Bonamia menziesii* and one population of *Hibiscus brackenridgei* ssp. *brackenridgei* on that island is negatively affected by axis deer (HHP 1992e1; J. Lau, pers. comm., 1992). Two populations of *Sesbania tomentosa* at Paomai and Mahana on Lanai were last seen in the mid-1950s (HHP 1992j17, 1992j38). Those areas have long supported axis deer, which probably pose the primary threat to those two *Sesbania* populations. Elsewhere on Lanai, one population of *Vigna o-wahuensis* above Lapaiki and one population of *Spermolepis hawaiiensis* at Kapoho are threatened by axis deer (HHP 1992L7, 1992m23). To control deer in what remains of Lanai's dry forests, TNCH is presently erecting fenced exclosures to protect populations of rare taxa (including two populations of *Bonamia menziesii*) that occur within Kanepuu Preserve (Heidi Bornhorst, TNCH, and J. Lau, pers. comm., 1992). Although the fence is high enough to normally inhibit entry by deer, human pressure can force the deer to jump over the fence. On Maui, deer damage plants of two populations of *Hibiscus brackenridgei* ssp. *brackenridgei* at Puu O Kali by stripping the bark and breaking limbs (HHP 1992e1, 1992e8).

Black-tailed deer (*Odocoileus hemionus*) were first introduced to Kauai in 1961 for the purpose of sport hunting and today probably number well over 500 animals. The deer are presently confined to the western side of the island, where they feed on a variety of native and alien plants (van Riper and van Riper 1982). On Kauai, one population of *Bonamia menziesii* in Paaiki Valley and the population of *Flueggea neowawraea* in Paaiki and Mahanaloa valleys are threatened by black-tailed deer (J. Lau, pers. comm., 1992).

Large-scale ranching of cattle (*Bos taurus*) in the Hawaiian Islands began in the middle of the 19th century on the islands of Kauai, Oahu, Maui, and Hawaii. Large ranches tens of thousands of acres in size developed on East Maui and Hawaii (Cuddihy and Stone 1990) where most of the State's large ranches still exist today. Degradation of native

forests used for ranching activities became evident soon after full-scale ranching began. The negative impact of cattle on Hawaii's ecosystem is similar to that described for goats and deer (Cuddihy and Stone 1990, Stone 1985). Cattle grazing continues in several lowland regions in the northern portion of the Waianae Mountains of Oahu: in Lualualei, where one population of *Bonamia menziesii* exists, and in Kaumoku Gulch, where one population of *Hibiscus brackenridgei* ssp. *mokuleianus* remains (HHP 1992b30; J. Lau, pers. comm., 1992). On Molokai, cattle ranching is slowly recovering from setbacks caused by recent herd reductions enforced in an effort to eliminate bovine tuberculosis from domestic and feral stock. As cattle ranching becomes reestablished on Molokai and the number of cattle increases, the threat to the rare plant species that remain in those ranching areas will also likely increase. One population of *Sesbania tomentosa* located east of Moomomi Preserve grows in a grazing area. On Maui, cattle ranching is the primary agricultural activity on the west and southwest slopes of East Maui and in lowland regions of West Maui. On both East and West Maui, one or more populations of *Bonamia menziesii, Diellia erecta,* and *Hibiscus brackenridgei* ssp. *brackenridgei* and the only Maui population of *Flueggea neowawraea* continue to be threatened by grazing cattle (HHP 1992c13; J. Lau, pers. comm., 1992). The *Flueggea neowawraea* population and one of the *Bonamia menziesii* populations grow within a fenced exclosure. Although probably minimal, the possibility of cattle entering the exclosure poses a potential threat. In the Kamaoa-Puueo and South Point regions of the island of Hawaii, cattle continue to graze in habitat currently occupied by most of the populations of *Sesbania tomentosa* on that island (J. Lau, pers. comm., 1992). In addition, one population of *Hibiscus brackenridgei* ssp. *brackenridgei* and the only known population of *Bonamia menziesii* on that island grow in regions currently used for cattle ranching (J. Lau, pers. comm., 1992).

Habitat disturbance caused by human activities threatens two of the proposed taxa. On West Maui, all-terrain vehicles have driven over *Sesbania tomentosa* plants growing west of Nakalele Point lighthouse (HHP 1992j43). Continued off-road activity threatens to destroy a significant portion of that population. On Hawaii Island, a dirt road runs through a population of *Sesbania tomentosa* located in the Kamaoa-Puueo region (HHP 1992j50). Off-road activity would damage a significant portion of that population as well. In the Puu Anahulu region on that island, a ranch road was bulldozed close to a plant of *Hibiscus brackenridgei* ssp. *brackenridgei* in 1989 (HHP 1992e6). Continued road development threatens to destroy the only known population of that taxon in the area.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Overutilization is not known to be a factor, but unrestricted collecting for scientific or horticultural purposes or excessive visits by individuals interested in seeing rare plants could result from increased publicity and would seriously impact the six species whose low numbers make them especially vulnerable to disturbances (*Diellia erecta, Hibiscus brackenridgei, Mariscus pennatiformis, Neraudia sericea, Solanum incompletum,* and *Vigna o-wahuensis*). Such disturbances could also promote erosion and greater ingression of alien plant species.

C. *Disease and predation.* Black twig borer (*Xylosandrus compactus*) has been cited as an immediate threat to all extant populations of *Flueggea neowawraea* (J. Lau, pers. comm., 1992). The black twig borer burrows into the branches and introduces a pathogenic fungus, pruning the host severely and often killing branches or whole plants (Howarth 1985). All known plants of *Flueggea neowawraea* suffer slight to severe defoliation and reduced vigor due to infestations of this alien insect.

Evidence of predation on two of the proposed taxa by ungulates (cattle, deer, goats) is documented on Oahu, Lanai, and Maui. On Oahu, plants of *Bonamia menziesii* at Lualualei grow over native vegetation and drape well below the browse line of cattle, indicating the potential for cattle to feed on the plants (HHP 1992b30). On Lanai, axis deer are known to feed on this species, especially at Kanepuu. Depredation of *Hibiscus brackenridgei* ssp. *brackenridgei* by goats has been observed on Lanai and Maui. Goats are known to eat the branch tips and strip the bark of the plants (HHP 1992e14). While there is no evidence of predation on the other 11 species, none of them are known to be unpalatable to cattle, deer, or goats. Predation is therefore a probable threat to species growing at sites where those animals have been reported (*Diellia erecta, Flueggea neowawraea, Neraudia sericea, Plantago princeps, Sesbania tomentosa, Spermolepis hawaiiensis,* and *Vigna o-wahuensis*) (see Factor A).

D. *The inadequacy of existing regulatory mechanisms.* Of the 12 proposed species, a total of 10 have populations located on private land, 1 on County land, 8 on State land, and 9 on Federal land. While 8 of the species occur in more than 1 of those ownership categories, the other 4 are restricted to a single category (i.e., only on private, State, or Federal land). There are no State laws or existing regulatory mechanisms at the present time to protect or prevent further decline of these plants on private land. However, Federal listing would automatically invoke listing under Hawaii State law, which prohibits taking and encourages conservation by State Government agencies. State regulations prohibit the removal, destruction, or damage of plants found on State lands. However, the regulations are difficult to enforce because of limited personnel. Hawaii's Endangered Species Act (HRS, Sect. 195D–4(a)) states, "Any species of aquatic life, wildlife, or land plant that has been determined to be an endangered species pursuant to the [Federal] Endangered Species Act shall be deemed to be an endangered species under the provisions of this chapter and any indigenous species of aquatic life, wildlife, or land that has been determined to be a threatened species pursuant to the [Federal] Endangered Species Act shall be deemed to be a threatened species under the provisions of this chapter." Further, the State may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species (HRS, Sect. 195D–5(c)). Funds for these activities could be made available under section 6 of the Federal Act (State Cooperative Agreements). Listing of these 12 plant species would therefore reinforce and supplement the protection available under State law.

E. *Other natural or manmade factors affecting its continued existence.* Eleven of the 12 species being proposed for listing are threatened by competition with 1 or more alien plant species (see Table 2). The most significant of these appear to be *Schinus terebinthifolius* (Christmasberry), *Psidium cattleianum* (strawberry guava), *Melinus minutiflora* (molasses grass), *Pennisetum setaceum* (fountain grass), *Clidemia hirta* (Koster's curse), *Lantana camara* (lantana), *Leucaena leucocephala* (koa haole), *Prosopis pallida* (kiawe), *Toona ciliata* (Australian red cedar), *Cenchrus ciliaris* (buffelgrass), *Rubus argutus* (prickly Florida blackberry), *Passiflora*

mollissima (banana poka), and *Rubus ellipticus* (Himalayan raspberry).

Many noxious alien plants such as Christmasberry have invaded the dry to mesic lowland regions of the Hawaiian Islands. Introduced to Hawaii before 1911, Christmasberry forms dense thickets that shade out and displace other plants (Cuddihy and Stone 1990). This fast-growing tree or shrub is found in lowland areas of the major Hawaiian Islands (Smith 1985) and is currently expanding its range. Christmasberry is a major component of the mesic forests of the Waianae and Koolau Mountains of Oahu. For example, over half of the populations of *Bonamia menziesii*, 2 of the populations of *Plantago princeps* var. *princeps*, and all 15 populations of *Flueggea neowawraea* that occur on Oahu are negatively affected by this invasive plant (HHP 1992b18, 1992b22, 1992b31, 1992d3, 1992d15, 1992d16; J. Lau, pers. comm., 1992). In addition, one population of *Diellia erecta* at Halawa Valley on Molokai and one population of *Bonamia menziesii* on Lanai are also affected (J. Lau, pers. comm., 1992). On Maui, Christmasberry is spreading in Iao Valley and on the south slope of East Maui (Haleakala Volcano) and is one of the primary alien plant threats to one or more populations of *Bonamia menziesii*, *Diellia erecta*, and *Plantago princeps* var. *laxiflora* that exist there (J. Lau, pers. comm., 1992). On the island of Hawaii, Christmasberry continues to threaten at least two populations of *Diellia erecta* and *Flueggea neowawraea* in the regions of Manuka and Honomalino in the South Kona District (HHP 1992d34; J. Lau, pers. comm., 1992).

Strawberry guava, an invasive shrub or small tree native to tropical America, has become naturalized on all of the main Hawaiian islands. Like Christmasberry, strawberry guava is capable of forming dense stands that exclude other plant species (Cuddihy and Stone 1990) and is dispersed mainly by feral pigs and fruit-eating birds (Smith 1985). This alien plant grows primarily in mesic and wet habitats and provides food for several alien animal species, including feral pigs and game birds, which disperse the plant's seeds through the forest (Smith 1985, Wagner *et al.* 1985). Strawberry guava is considered one of the greatest alien plant threats to Hawaii's rain forests and is known to pose a direct threat to at least one population each of *Adenophorus periens* and *Bonamia menziesii* on the island of Kauai (HHP 1992a16; J. Lau, pers. comm., 1992). Strawberry guava is a major invader of forests in the Waianae and Koolau Mountains of Oahu, where it often forms single-species stands. It poses an immediate threat to 6 populations of *Bonamia menziesii*, 10 populations of *Flueggea neowawraea*, and 1 population of *Plantago princeps* var. *princeps* on that island (HHP 1992b5, 1992b14, 1992b18, 1992b21; J. Lau, pers. comm., 1992). On Molokai, the habitat of the Halawa Valley population of *Diellia erecta* is currently being invaded by strawberry guava (HHP 1992c12). On Maui, strawberry guava is beginning to invade the habitat of one population each of *Bonamia menziesii* and *Plantago princeps* var. *laxiflora* on West Maui and at least one population each of *Diellia erecta* and *Plantago princeps* var. *laxiflora* on East Maui (J. Lau, pers. comm., 1992). It is also a major threat to the habitat of *Adenophorus periens* in Kahaualea NAR on the island of Hawaii (HHP 1992a8).

First introduced to the Hawaiian Islands as cattle fodder, molasses grass was later planted for erosion control (Cuddihy and Stone 1990). This alien grass quickly spread to dry and mesic forests previously disturbed by ungulates. Molasses grass produces a dense mat capable of smothering plants (Smith 1985), essentially preventing seedling growth and native plant reproduction (Cuddihy and Stone 1990). Because it burns readily and often grows at the border of forests, molasses grass tends to carry fire into areas with woody native plants (Cuddihy and Stone 1990, Smith 1985). It is able to spread prolifically after a fire and effectively compete with less fire-adapted native plant species, ultimately creating a stand of alien grass where forest once stood. Molasses grass is becoming a major threat to seven of the proposed species on four islands. In the Waianae Mountains of Oahu, three populations of *Bonamia menziesii* and one population of *Plantago princeps* var. *princeps* are immediately threatened by this grass. On Molokai, at least one population each of *Diellia erecta*, *Plantago princeps* var. *laxiflora*, and *Neraudia sericea* and all populations of *Vigna o-wahuensis* on the island are also negatively affected. Molasses grass is quickly spreading throughout the dry regions of West Maui, threatening two populations of *Diellia erecta* there. On Hawaii Island, a population of *Sesbania tomentosa* in Hawaii Volcanoes National Park is located in an area invaded by molasses grass (J. Lau, pers. comm., 1992).

Like molasses grass, fountain grass has greatly increased fire risk in some regions, especially on the dry slopes of Hualalai, Kilauea, and Mauna Loa volcanoes on the island of Hawaii. The effects of fountain grass invasion are similar to those discussed above for molasses grass. Fountain grass threatens the native vegetation on the leeward slopes of Hualalai in a region where at least one population of *Hibiscus brackenridgei* ssp. *brackenridgei* and the only known Hawaii Island populations of *Bonamia menziesii* and *Vigna o-wahuensis* exist (HHP 1992m12; J. Lau, pers. comm., 1992).

Koster's curse, a noxious shrub native to tropical America, was first reported on Oahu in 1941. It had spread through much of the Koolau Mountains by the early 1960s, and spread to the Waianae Mountains by 1970 (Cuddihy and Stone 1990). It poses a serious threat to two populations of *Plantago princeps* var. *longibracteata* in the Koolau Mountains. Koster's curse is widespread in Honouliuli and threatens two populations of *Flueggea neowawraea* that occur in that area of the Waianae Mountains. This prolific alien plant has recently spread to five other islands, including Kauai, where there are at least five small infestations totalling about 40 ha (100 ac) (Cuddihy and Stone 1990); one of these poses an immediate threat to one population of *Adenophorus periens* in Waioli Valley (J. Lau, pers. comm., 1992).

Lantana, a native of the West Indies, became naturalized in dry to mesic forests and shrublands of the Hawaiian Islands before 1871 (Cuddihy and Stone 1990). This shrub often forms thick cover and produces chemicals that inhibit the growth of other plant species (Smith 1985). On Kauai, lantana is a major component of the vegetation at Paaiki Valley and Waimea Canyon and is rapidly becoming established in Pohakuao. It poses a threat to populations of *Flueggea neowawraea* in those areas (HHP 1992d13, 1992d17, 1992d18, 1992d30, 1992d31). One population of *Bonamia menziesii* on Lanai and one on Maui are also negatively affected by this invasive plant (HHP 1992b1, 1992b24).

Koa haole, a shrub naturalized and often dominant in low elevation, dry, disturbed areas on all of the main Hawaiian Islands, threatens to degrade the habitat of six of the proposed species. Koa haole is one of the major weeds found at Polihale on the island of Kauai, growing in the vicinity of a population of *sesbania tomentosa* (HHP 1992j33; J. Lau, pers. comm., 1992). In the Waianae Mountains of Oahu, koa haole is one of the primary weed threats to half of the *Bonamia menziesii* populations and all of the *Hibiscus brackenridgei* ssp. *mokuleianus* populations found in the area (HHP 1992b12, 1992b19, 1992e23; J. Lau, pers. comm., 1992). Most of the Molokai

populations of *Sesbania tomentosa* and one of the Kahoolawe populations of *Vigna o-wahuensis* are also negatively affected by koa haole (HHP 1992j13; J. Lau, pers. comm., 1992). On Maui, koa haole poses a threat to *Hibiscus brackenridgei* ssp. *brackenridgei* and *Spermolepis hawaiiensis* in the Lihau Section of the West Maui NAR, and is probably also a threat to *Hibiscus brackenridgei* ssp. *brackenridgei* and *Sesbania tomentosa* elsewhere on West Maui (HHP 1992e3; J. Lau, pers. comm., 1992).

Kiawe, a deciduous thorny tree that can grow to 20 m (65 ft) in height, overshadows other plants and competes with associated vegetation for available water and space. At Polihale on the island of Kauai, it is the primary alien plant threat to *Sesbania tomentosa*. Two Molokai populations of *Sesbania tomentosa* compete with kiawe for water and space on Moomomi's beaches. The primary alien plant threat to *Vigna o-wahuensis* on the island of Kahoolawe is kiawe (HHP 1992m21).

Australian red cedar is a fast-growing tree that was probably introduced to Hawaii for lumber. It is now found in many of Hawaii's extensively planted lowland forests and has become naturalized in mesic to wet forests (Wagner *et al.* 1990). Today, this tree is a definite threat to at least one population of *Bonamia menziesii* and most of the plants of *Flueggea neowawraea* in the Waianae Mountains of Oahu (J. Lau, pers. comm., 1992).

Buffelgrass forms continuous cover in dry habitats and provides excellent fuel for fire, from which it recovers quickly. Its seeds are easily dispersed by wind (Smith 1985). Buffelgrass threatens the habitat of two populations of *Sesbania tomentosa* on Molokai, and at least one population of *Vigna o-wahuensis* on Kahoolawe (J. Lau, pers. comm., 1992).

Prickly Florida blackberry was introduced to the Hawaiian Islands in the late 1800s (Haselwood and Motter 1976). The fruit are easily spread by birds to open areas where this plant can form dense, impenetrable thickets (Smith 1985). The Kauai population of *Adenophorus periens* that is located at the boundary of Hono O Na Pali NAR and Na Pali Coast State Park is threatened by this noxious weed (J. Lau, pers. comm., 1992).

A vine in the passionflower family, banana poka was introduced to the islands in the 1920s, probably as an ornamental. This vine is extremely detrimental to certain wet forest habitats of Kauai, Maui, and Hawaii. Heavy growth of this vine can cause damage or death to the native trees by overloading branches, causing breakage, or by forming a dense canopy cover, intercepting sunlight and shading out native plants below. An infestation of this vine is located at Olaa Tract on Hawaii Island, the site of one population of *Adenophorus periens* (J. Lau, pers. comm., 1992).

A recent introduction to the Hawaiian Islands, yellow Himalayan raspberry is rapidly becoming a major weed pest in wet forests, pastures, and other open areas on the island of Hawaii. It forms large thorny thickets and displaces native plants. Its ability to invade the understory of wet forests enables it to fill a niche presently unoccupied by any other major wet forest weed in Hawaii. This has resulted in an extremely rapid population expansion of this alien plant in recent years. One population of *Adenophorus periens* grows in Olaa Tract within Hawaii Volcanoes National Park in a region where yellow Himalayan raspberry is found in increasing numbers (J. Lau, pers. comm., 1992).

There are a number of other alien plant species that pose a significant threat to populations of the plants being proposed. *Cynodon dactylon* (Bermuda grass) is a major threat to at least one population of *Sesbania tomentosa* at Moomomi on Molokai. *Senecio mikanioides* (German ivy), a noxious, wind-dispersed vine that forms localized mats of vegetation, is a threat to the only currently known population of *Solanum incompletum* on the island of Hawaii (J. Lau, pers. comm., 1992). This *Solanum incompletum* population is fenced and protected from ungulates; however, it is not protected from German ivy. *Syzygium cumini* (Java plum), a large evergreen tree, is an aggressive invader of undisturbed forests (Smith 1985). It threatens to shade out the only known populations of *Hibiscus brackenridgei* ssp. *mokuleianus* on Oahu (J. Lau, pers. comm., 1992). *Melia azedarach* (pride of India), a fast-growing deciduous tree that forms deep shade, grows in open dry habitats. A major infestation of this large tree in Waimea Canyon on Kauai poses an immediate threat to individuals of *Flueggea neowawraea* (HHP 1992d18, 1992d31).

Fire threatens five plant species growing in dry to mesic grassland, shrubland, and forests on five islands. On Oahu, fire is a potential threat to three populations of *Bonamia menziesii* and two populations of *Flueggea neowawraea* located adjacent to Makua Military Reservation, where current ordnance training exercises could unintentionally ignite fires (HHP 1992b12, 1992b19, 1992b20, 1992d12; J. Lau, pers. comm., 1992). The area has had a history of fires that may have burned through at least one of the populations of *Bonamia menziesii* and burned to within a few tens of meters of another (HHP 1992b19, 1992b20). Fire is also a threat to the following populations: one population each of *Bonamia menziesii* and *Flueggea neowawraea* on Oahu, one population of *Bonamia menziesii* on Lanai, two populations of *Sesbania tomentosa* and one population of *Vigna o-wahuensis* on Molokai, all known populations of *Vigna o-wahuensis* on Kahoolawe, and at least one population each of *Bonamia menziesii* and *Sesbania tomentosa* on Hawaii Island (HHP 1992d12; J. Lau, pers. comm., 1992). Of note is a population of *Adenophorus periens* in Kahaualea NAR on the island of Hawaii (HHP 1992a8). Tephra fallout and lava flows from Kilauea Volcano have affected the NAR over the past several years. Wildfires ignited by volcanic activity have destroyed some of the NAR's mesic and wet forests. In addition, tephra fallout and noxious volcanic gases have caused extensive damage to surrounding native forests. Such catastrophic natural events threaten to destroy the region's largest population of *Adenophorus periens*.

The small number of populations and of individual plants of seven of these species (*Diellia erecta, Hibiscus brackenridgei, Mariscus pennatiformis, Neraudia sericea, Solanum incompletum, Spermolepis hawaiiensis,* and *Vigna o-wahuensis*) increases the potential for extinction from stochastic events. The limited gene pool may depress reproductive vigor, or a single human-caused or natural environmental disturbance could destroy a significant percentage of the individuals or the only known extant population. For example, *Solanum incompletum* is known from a single population on Hawaii Island and numbers only two individuals. A total of 5 of the proposed species has fewer than 10 populations and 5 of the species are estimated to number no more than 100 individuals (see Table 2). All of the proposed species except *Sesbania tomentosa* either number fewer than 20 populations or total fewer than 200 individuals. The reproductive system of *Flueggia neowawraea* further exacerbates the problem of limited numbers: because each tree bears only male or female flowers, they must be cross-pollinated from a different tree (Hayden 1990). If only a few trees flower at the same time, or if flowering trees are too widely separated for pollination by insects, no seed will be set. The survival of small, isolated populations, which probably are already

experiencing depressed reproductive vigor, is therefore further threatened.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to propose this rule. Based on this analysis, the preferred action is to propose 12 species, *Adenophorus periens, Bonamia menziesii, Diellia erecta, Flueggea neowawraea, Hibiscus brackenridgei, Mariscus pennatiformis, Neraudia sericea, Plantago princeps, Sesbania tomentosa, Solanum incompletum, Spermolepis hawaiiensis,* and *Vigna o-wahuensis,* as endangered. The 12 species are threatened by 1 or more of the following: habitat degradation and/or predation by pigs, goats, deer, and cattle; competition for space, light, water, and nutrients by alien plants; habitat loss from fires; human impacts from recreational activities; and insect infestations. Seven of the 12 species either number no more than about 100 individuals or are known from fewer than 10 populations. Small population size and limited distribution make these species particularly vulnerable to extinction from reduced reproductive vigor or from stochastic events. Because these 12 species are in danger of extinction throughout all or a significant portion of their ranges, they fit the definition of endangered as defined in the Act. Therefore, the determination of endangered status for these 12 species appears warranted.

Critical habitat is not being proposed for the 12 species included in this rule for reasons discussed in the "Critical Habitat" section of this proposal.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for these species. Such a determination would result in no known benefit to the species. The species have low total populations and/or numbers of individuals and face anthropogenic threats. The publication of precise maps and descriptions of critical habitat in the **Federal Register** and local newspapers as required in proposal for critical habitat would increase the degree of threat to these plants from take or vandalism and could contribute to their decline. The listing of these species as either endangered or threatened publicizes the rarity of the plants and, thus, can make these plants attractive to researchers, curiosity seekers, or collectors of rare plants. All involved parties and the major landowners have been notified of the importance of protecting the habitat of these species. Protection of the habitat of the species will be addressed through the recovery process and through the section 7 consultation process. Therefore, the Service finds that designation of critical habitat for these species is not prudent at this time, because such designation would increase the degree of threat from vandalism, collecting, or other human activities and because it is unlikely to aid in the conservation of these species.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the State and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species as its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Two taxa are located on Federal land in a national wildlife refuge on three Northwestern Hawaiian Islands: *Mariscus pennatiformis* ssp. *bryanii* grows only on the island of Laysan and *Sesbania tomentosa* is on Necker and Nihoa. On Hawaii Island, two species (*Adenophorus periens* and *Sesbania tomentosa*) are located in Hawaii Volcanoes National Park. Three populations of *Plantago princeps* var. *laxiflora* are located in Haleakala National Park on Maui. The two national parks and historic site on Maui and Hawaii are under the jurisdiction of the National Park Service. Federal laws protect all plants on the national wildlife refuges, national parks, and national historic sites from damage or removal.

Six of the species being proposed occur on land owned or leased by the U.S. Department of Defense. Populations of *Bonamia menziesii* and *Flueggea neowawraea* are located in the mountains of the Lualualei Naval Reservation. No military activities currently affect those populations. On the island of Oahu, *Flueggea neowawraea* is known to grow on lands owned by the U.S. Army in Schofield Barracks Military Reservation. One population of *Hibiscus brackenridgei* ssp. *mokuleianus* may possibly occur at Schofield Barracks as well. Three of the proposed species are located on State-owned land currently leased to the U.S. military: On Oahu, *Bonamia menziesii* and *Flueggea neowawraea* are located within Makua Military Reservation and *Spermolepis hawaiiensis* is located in Diamond Head Reservation, leased by the Department of Defense. Portions of Makua Military Reservation are used by the Army and other branches of the military for ordnance training. The two species are not located inside the impact areas or adjacent buffer zones and thus are not directly affected by military activities. The Army has constructed firebreaks on the Makua Military Reservation to minimize damage from unintentional fires that occasionally result from stray bullets (Herve Messier, U.S. Army, Ft. Shafter, pers. comm., 1990). Plants of *Spermolepis hawaiiensis* are restricted to the outer slope of Diamond Head and are not in an area affected by military activities. Two proposed species (*Sesbania tomentosa* and *Vigna o-wahuensis*) grow on the federally owned island of Kahoolawe. Although ordnance disposal procedures are currently in place and periodic detonation of ordnance is required on the island, the populations of the three species found there are at sites too remote to sustain impacts from such detonation (J. Lau, pers. comm., 1992). The federally appointed Kahoolawe Island Conveyance Commission is currently assessing the future use of the island and possible

transfer of land title to the State. If such a transfer were to occur, the three species would continue to be protected under both the Federal and State Endangered Species Acts. There are no other known Federal activities that occur within the presently known habitat of these 12 plant species.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 for endangered plants set forth a series of general prohibitions and exceptions that apply to all endangered plant species. With respect to the 12 plant species proposed to be listed as endangered, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61 would apply. These prohibitions, in part, make it illegal with respect to any endangered plant for any person subject to the jurisdiction of the United States to import or export; transport in interstate or foreign commerce in the course of a commercial activity; sell or offer for sale in interstate or foreign commerce; remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any area under Federal jurisdiction; or remove, cut, dig up, damage, or destroy any such species on any other area in knowing violation of any State law or regulation or in the course of any violation of a State criminal trespass law. Certain exceptions apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered plant species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued because the species are not common in cultivation nor in the wild.

Requests for copies of the regulations concerning listed plants and inquiries regarding prohibitions and permits may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, room 432, Arlington, Virginia 22203–3507 (703/358–2104; FAX 703/358–2281).

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to these species;

(2) The location of any additional populations of these species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;

(3) Additional information concerning the range, distribution, and population size of these species; and

(4) Current or planned activities in the subject area and their possible impacts on these species.

The final decision on this proposal will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for at least one public hearing on this proposal, if requested. Hearing requests must be received within 45 days of the date of publication of the proposal. Such requests must be made in writing and addressed to the Field Supervisor of the Pacific Islands Office (see **ADDRESSES** section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment or Environmental Impact Statement, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited herein is available upon request from the Pacific Islands Office (see **ADDRESSES** above).

Author

The primary authors of this proposed rule are Joan E. Canfield and Derral R. Herbst, Pacific Islands Office, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, room 6307, P.O. Box 50167, Honolulu, Hawaii 96850 (808/541–2749). Substantial data were contributed by the Hawaii Heritage Program.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Proposed Regulations Promulgation

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend 17.12(h) by adding the following species, in alphabetical order under the families indicated, and by adding two new families, "Grammitidaceae—Grammitis family" and "Plantaginaceae—Plantain family," in alphabetical order, to the List of Endangered and Threatened Plants to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
•	•	•	•	•	•	•
Apiaceae—Parsley family:						
•	•	•	•	•	•	•
Spermolepis hawaiiensis	None	U.S.A. (HI)	E		NA	NA

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
• •	•	•	•	•		•
Aspleniaceae—Spleenwort family:						
• •	•	•	•	•		•
Diellia erecta	None	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Convolvulaceae—Morning-glory family:						
• •	•	•	•	•		•
Bonamia menziesii	None	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Cyperaceae—Sedge family:						
• •	•	•	•	•		•
Mariscus pennatiformis	None	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Euphorbiaceae—Spurge family:						
• •	•	•	•	•		•
Flueggea neowawraea	Mehamehame	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Fabaceae—Pea family:						
• •	•	•	•	•		•
Sesbania tomentosa	'Ohai	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Vigna o-wahuensis	None	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Grammitidaceae—Grammitis family:						
• •	•	•	•	•		•
Adenophorus periens	Pendant kihi fern	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Malvaceae—Mallow family:						
• •	•	•	•	•		•
Hibiscus brackenridgei	Ma'o hau hele	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Plantaginaceae—Plantain family:						
Plantago princeps	Laukahi Kuahiwi	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Solanaceae—Nightshade family:						
• •	•	•	•	•		•
Solanum incompletum	Popolo ku mai	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•
Urticaceae—Nettle family:						
• •	•	•	•	•		•
Neraudia sericea	None	U.S.A. (HI)	E		NA	NA
• •	•	•	•	•		•

Dated: August 17, 1993.

Richard N. Smith,

Acting Director, Fish and Wildlife Service.

[FR Doc. 93–22306 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-55-P-M

Notices

Federal Register
Vol. 58, No. 176
Tuesday, September 14, 1993

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. 93–117–1]

Availability of Environmental Assessments and Findings of No Significant Impact

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Notice.

SUMMARY: We are advising the public that two environmental assessments and findings of no significant impact have been prepared by the Animal and Plant Health Inspection Service relative to the issuance of permits to allow the field testing of genetically engineered organisms. The environmental assessments provide a basis for our conclusion that the field testing of these genetically engineered organisms will not present a risk of introducing or disseminating a plant pest and will not have a significant impact on the quality of the human environment. Based on its findings of no significant impact, the Animal and Plant Health Inspection Service has determined that environmental impact statements need not be prepared.

ADDRESSES: Copies of the environmental assessments and findings of no significant impact are available for public inspection at USDA, room 1141, South Building, 14th Street and Independence Avenue SW., Washington, DC, between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. Persons wishing to inspect those documents are encouraged to call ahead on (202) 690–2817 to facilitate entry into the reading room.

FOR FURTHER INFORMATION CONTACT: Dr. Arnold Foudin, Deputy Director, Biotechnology Permits, BBEP, APHIS, USDA, room 850, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782, (301) 436–7612. For copies of the environmental assessments and findings of no significant impact, write to Mr. Clayton Givens at the same address. Please refer to the permit numbers listed below when ordering documents.

SUPPLEMENTARY INFORMATION: The regulations in 7 CFR part 340 (referred to below as the regulations) regulate the introduction (importation, interstate movement, and release into the environment) of genetically engineered organisms and products that are plant pests or that there is reason to believe are plant pests (regulated articles). A permit must be obtained before a regulated article may be introduced into the United States. The regulations set forth the procedures for obtaining a limited permit for the importation or interstate movement of a regulated article and for obtaining a permit for the release into the environment of a regulated article. The Animal and Plant Health Inspection Service (APHIS) has stated that it would prepare an environmental assessment and, when necessary, an environmental impact statement before issuing a permit for the release into the environment of a regulated article (see 52 FR 22906).

In the course of reviewing each permit application, APHIS assessed the impact on the environment that releasing the organisms under the conditions described in the permit application would have. APHIS has issued permits for the field testing of the organisms listed below after concluding that the organisms will not present a risk of plant pest introduction or dissemination and will not have a significant impact on the quality of the human environment. The environmental assessments and findings of no significant impact, which are based on data submitted by the applicants and on a review of other relevant literature, provide the public with documentation of APHIS' review and analysis of the environmental impacts associated with conducting the field tests.

Environmental assessments and findings of no significant impact have been prepared by APHIS relative to the issuance of permits to allow the field testing of the following genetically engineered organisms:

Permit No.	Permittee	Date Issued	Organisms	Field Test Location
93–054–02 ...	Michigan State University.	08–11–93	Bentgrass plants genetically engineered to express the enzyme betaglucuronidase as a marker.	Michigan.
93–165–02 ...	Upjohn Company.	08–12–93	Squash plants genetically engineered to express resistance to zucchini yellow mosaic virus, and watermelon mosaic virus 2.	North Carolina.

The environmental assessments and findings of no significant impact have been prepared in accordance with: (1) The National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321 *et seq.*), (2) Regulations of the Council on Environmental Quality for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500–1508), (3) USDA Regulations Implementing NEPA (7 CFR part 1b), and (4) APHIS Guidelines Implementing NEPA (44 FR 50381–50384, August 28, 1979, and 44 FR 51272–51274, August 31, 1979).

Done in Washington, DC, this 8th day of September 1993

Lonnie J. King,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 93–22425 Filed 9–13–93; 8:45 am]

BILLING CODE 3410-34-P

[Docket No. 93–114–1]

Availability of List of U.S. Veterinary Biological Product and Establishment Licenses and U.S. Veterinary Biological Product Permits Issued, Suspended, Revoked, or Terminated

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Notice.

SUMMARY: This notice pertains to veterinary biological product and establishment licenses and veterinary biological product permits that were issued, suspended, revoked, or terminated by the Animal and Plant Health Inspection Service, during the month of July 1993. These actions have been taken in accordance with the regulations issued pursuant to the Virus-Serum-Toxin Act. The purpose of this notice is to inform interested persons of the availability of a list of these actions and advise interested persons that they may request to be placed on a mailing list to receive the list.

FOR FURTHER INFORMATION CONTACT: Ms. Maxine Kitto, Program Assistant, Veterinary Biologics, BBEP, APHIS, USDA, room 838, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782, (301) 436–8245. For a copy of this month's list, or to be placed on the mailing list, write to Ms. Kitto at the above address.

SUPPLEMENTARY INFORMATION: The regulations in 9 CFR part 102, "Licenses For Biological Products," require that every person who prepares certain biological products that are subject to the Virus-Serum-Toxin Act (21 U.S.C. 151 *et seq.*) shall hold an unexpired, unsuspended, and unrevoked U.S. Veterinary Biological Product License. The regulations set forth the procedures for applying for a license, the criteria for determining whether a license shall be issued, and the form of the license.

The regulations in 9 CFR part 102 also require that each person who prepares biological products that are subject to the Virus-Serum-Toxin Act (21 U.S.C. 151 *et seq.*) shall hold a U.S. Veterinary Biologics Establishment License. The regulations set forth the procedures for applying for a license, the criteria for determining whether a license shall be issued, and the form of the license.

The regulations in 9 CFR part 104, "Permits for Biological Products," require that each person importing biological products shall hold an unexpired, unsuspended, and unrevoked U.S. Veterinary Biological Product Permit. The regulations set forth the procedures for applying for a permit, the criteria for determining whether a permit shall be issued, and the form of the permit.

The regulations in 9 CFR parts 102 and 105 also contain provisions concerning the suspension, revocation, and termination of U.S. Veterinary Biological Product Licenses, U.S. Veterinary Biologics Establishment Licenses, and U.S. Veterinary Biological Product Permits.

Each month, the Veterinary Biologics section of Biotechnology, Biologics, and Environmental Protection prepares a list of licenses and permits that have been issued, suspended, revoked, or terminated. This notice announces the availability of the list for the month of July 1993. The monthly list is also mailed on a regular basis to interested persons. To be placed on the mailing list you may call or write the person designated under **FOR FURTHER INFORMATION CONTACT.**

Done in Washington, DC, this 9th day of September 1993.

Lonnie J. King,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 93–22424 Filed 9–13–93; 8:45 am]

BILLING CODE 3410-34-P

Forest Service

Exemption of Selway Fire Timber Salvage Project From Appeal

AGENCY: Forest Service, USDA.

ACTION: Notification that a project designed to recover dead and dying timber is exempted from appeals filed under 36 CFR part 217.

SUMMARY: In September 1991, the Rackliff Fire on the Nez Perce National Forest burned about 3,400 acres. In August 1992, the Selway Complex burned about 733 acres near the Rackliff Fire. In February 1993, the Forest Supervisor proposed a salvage timber sale project to recover dead and damaged sawtimber from within the perimeter of these fires. The Forest Supervisor has determined, through an environmental analysis documented in the Selway Fire Timber Salvage Environmental Assessment (EA) and Decision Notice, that good cause exists to rehabilitate National Forest System lands and recover damaged resources. Salvage of commercial sawtimber within the affected area must be accomplished quickly to avoid further deterioration and to reduce the risk of catastrophic wild fire and to minimize the risk of insect infestation.

DATES: Effective on September 14, 1993.

FOR FURTHER INFORMATION CONTACT: Cynthia Lane, Selway District Ranger; Nez Perce National Forest; HCR 75, Box 91; Kooskia, ID 83539. Telephone 208–926–4258.

SUPPLEMENTARY INFORMATION: The Selway fires of 1991 and 1992 burned approximately 4,133 acres within the Selway River watershed. Most of the tree mortality and damage occurred on about 1,000 acres. The affected areas are located in Management Areas 8.2, 15, and 16, which are designed as suitable timberland in the Nez Perce Forest Plan (October 1987).

In February 1993, the Forest Supervisor proposed the salvage of commercial sawtimber on lands that were affected by these fires. This proposal was designed to meet the following needs: (1) Capture as much of the economic value as possible, (2) reduce or eliminate the food source for insects and reduce the potential for live trees to be impacted by the increase in insect populations, and (3) reduce potential fuel levels.

Nine significant environmental issues were identified through scoping, and these issues were the basis for the environmental analysis disclosed in the EA. Five alternatives were analyzed. Five other alternatives were considered but dismissed from detailed consideration.

The selected alternative would salvage approximately 5.5 MMBF of dead and damaged timber from approximately 398 acres. All yarding is to be done with helicopters to one landing, which will be accessed on existing roads. Approximately 0.3 miles of road reconstruction is required. The access road will be closed to public traffic after use.

The sale is designed to accomplish the objectives as quickly as possible to minimize the risk of insect infestations, to reduce fuel loading, and to recover merchantable sawtimber before it deteriorates in value and removal becomes infeasible. To expedite implementation of this decision, procedures outlined in 36 CFR 217.4(a)(11) are being carried out. Under this regulation, the following types of decisions may be exempted from administration appeal:

> Decisions related to the rehabilitation of National Forest System lands and recovery of forest resources resulting from * * * wildfires * * * when the Regional Forester * * * determines and gives notice in the **Federal Register** that good cause exists to exempt such decisions from review under this part.

Based on the environmental analysis documented in the Selway Fire Salvage Timber Sale EA and in the Nez Perce Forest Supervisor's Decision Notice, I have determined that good cause exists to exempt the decision to implement this project. Therefore, upon publication of this notice, the Selway Fire Salvage Timber Sale will not be subject to review under 36 CFR part 217.

Dated: September 8, 1993.

Christopher D. Risbrudt,

Deputy Regional Forester, Northern Region.

[FR Doc. 93–22366 Filed 9–13–93; 8:45 am]

BILLING CODE 3410-11-M

COMMISSION ON CIVIL RIGHTS

Membership of the Performance Review Board

AGENCY: U.S. Commission on Civil Rights.

ACTION: Notice of membership of the USCCR Performance Review Board.

SUMMARY: This notice announces the appointment of the Performance Review Board (PRB) of the United States Commission on Civil Rights. Publication of PRB membership is required by 5 U.S.C. 4314(c)(4).

The PRB provides fair and impartial review of the U.S. Commission on Civil Rights Senior Executive Service performance appraisals and makes recommendations regarding performance ratings and performance awards to the Staff Director, U.S. Commission on Civil Rights for the FY 1993 rating year.

FOR FURTHER INFORMATION CONTACT:

Ms. Marcia Tyler, Personnel Division, U.S. Commission on Civil Rights, 624 Ninth Street NW., Washington, DC 20425 (202) 376–8364.

Members

Lawrence B. Glick, Chairman of PRB, Acting General Counsel, U.S. Commission on Civil Rights

Sharon Smith Holston, Associate Commissioner for Management, Food and Drug Administration

Gene Kinlow, Deputy Assistant Secretary for Personnel Administration, Department of Health and Human Services

Bert Silver, Assistant Staff Director for Administration (Retired), U.S. Commission on Civil Rights

Dated: September 9, 1993.

Emma Gonzalez-Joy,

Solicitor.

[FR Doc. 93–22426 Filed 9–13–93; 8:45 am]

BILLING CODE 6335-01-M

DEPARTMENT OF COMMERCE

Bureau of Export Administration

Report of Disposition of Section 232 National Security Import Investigation of Ceramic Semiconductor Packages

AGENCY: Department of Commerce, Bureau of Export Administration, Office of Industrial Resource Administration.

ACTION: Notice of report of disposition of section 232 national security import investigation of ceramic semiconductor packages.

SUMMARY: The Secretary of Commerce has determined that imports of ceramic semiconductor packages are not a present threat to U.S. national security. The Secretary recommended steps to improve the economic condition and defense responsiveness of the U.S. ceramic semiconductor package industry, and said that he will review the status of the domestic industry in one year to determine whether another national security study is warranted. This notice includes the Executive Summary of the Department's section 232 investigation report to the President.

FOR FURTHER INFORMATION CONTACT: John A. Richards, Deputy Assistant Secretary for Industrial Resource Administration, (202) 482–4506, or Brad Botwin, Director, Strategic Analysis Division, (202) 482–4060, room H3878, U.S. Department of Commerce, Washington, DC 20230.

SUPPLEMENTARY INFORMATION: On November 18, 1992, the Bureau of Export Administration initiated an investigation of the impact of imports of ceramic semiconductor packages on the national security. The Department announced this action in the **Federal Register** on November 25, 1992, and solicited public comments at that time. This investigation was made pursuant to a petition brought by the Coors Electronic Package Company and Ceramic Process Systems Corporation under the terms of section 232 of the Trade Expansion Act of 1962, as amended. The Department had 270 days (in this case until August 16, 1993) to submit a report of its investigation to the President.

On August 16, 1993, the Department submitted its investigation report to the President. The investigation found that ceramic semiconductor packages were not now being imported into the United States in such quantities or under such circumstances as threaten to impair the national security. The Secretary stated that he will review the financial and production status of the domestic industry in one year, and if the situation warrants, another national security investigation will be initiated.

Although current conditions in the ceramic package industry do not present an immediate threat to national security, improving the capabilities of the domestic industry was deemed desirable for both economic and national security reasons. Therefore, the Secretary of Commerce recommended a four-part Action plan to improve the competitiveness of this industry in the United States. The recommended Action plan consists of the following: (1) Establishment of a Manufacturing Center of Excellence to address domestic producers' production deficiencies; (2) creation of a Materials Research and Development Program; (3) creation of a Product and Process Qualification Program; and (4) formation of a Government-Industry Ceramic Package Working Group to coordinate the above activities.

Commerce's Bureau of Export Administration (BXA) organized an interagency team of experts for this study effort, and conducted a comprehensive survey of all identifiable domestic ceramic package producers and importers, and a sample of ceramic package end users. The survey covered such topics as shipments, employment, R&D, investment, and defense capabilities. We supplemented this information with additional independent research, and a review of earlier public- and private-sector industry studies.

From a military perspective, we found that ceramic packages are a key component of the microelectronic element of virtually every U.S. military system. Defense products account for about 20 percent of all ceramic packages used in the United States. The investigation found that the U.S. industry suffered declines in profitability, capacity, capacity utilization, investment and employment between 1990 and 1992.

The text of the Commerce report (excluding business proprietary and national security classified information) will be made available for public review and duplication in the Bureau of Export Administration's Public Reference Room, room 4525, U.S. Department of Commerce, Washington, DC 20230, (202) 482–2593. Copies are available for sale from the National Technical Information Service (NTIS) by calling (703) 487–4650 and requesting PB 93–

192441. The Executive Summary follows below.

Iain S. Baird,

Acting Assistant Secretary for Export Administration.

Executive Summary

Finding and Recommendations

• The Department of Commerce finds that ceramic semiconductor packages are not being imported into the United States in quantities and under such circumstances as to threaten to impair U.S. national security. Although current conditions in the ceramic package industry do not present an immediate threat to national security, improving the capabilities of the domestic ceramic package industry is desirable for both economic and national security reasons.

• The Department of Commerce has developed an Action Plan consisting of four elements to address the manufacturing, technology, and financial shortfalls of the domestic ceramic package industry. This plan was developed with extensive input from representatives of a number of government agencies and laboratories with expertise in ceramic package material and manufacturing issues, and is a cost-effective, broad-based industry-government effort to address the challenges facing this key sector.

• The Action Plan consists of the following four elements:

(1) Manufacturing Center of Excellence for Ceramic Packages to address the production deficiencies of domestic producers;

(2) Ceramic Materials Research and Development Program to develop advanced materials to ensure the qualitative superiority of ceramic packages for defense and commercial use, to be led by the National Institute of Standards and Technology and Oak Ridge National Laboratory;

(3) Product and Process Qualification will be undertaken to remove one of the most costly impediments to the growth of the domestic industry. This qualification program involving on-site company certification and laboratory support will be carried out by the National Institute of Standards and Technology and Sandia National Laboratory.

(4) Government-Industry Working Group on Ceramic Packages to coordinate the above activities with each other and seek the participation of related industry end user groups to ensure continued commitment by all parties.

• In addition, the Department of Commerce will review the financial and production status of the domestic industry one year from now, and if the situation warrants will initiate another section 232 investigation.

• The Department of Commerce/Bureau of Export Administration will also examine further the criteria for determining in future section 232 investigations what "threaten[s] to impair the national security" in the post-Cold War environment.

Background

• On November 10, 1992, Coors Electronic Package Company (Coors) of Chattanooga, TN and Ceramic Process Systems Corporation (CPSC) of Milford, MA petitioned the Department of Commerce (DOC) to conduct an investigation under section 232 of the Trade Expansion Act of 1962, as amended, to determine the effect of imports of ceramic semiconductor packages on the national security.

• In their petition, Coors and CPSC asserted that "(t)he most important example of the interdependence of the U.S. industrial base is the symbiotic relationship between semiconductors and the packages which house these integrated circuits." Coors/CPSC added that "a crisis exists within the ceramic package industry—a crisis precipitated by increased imports of ceramic packages from Japan and the 'monopoly' stranglehold of one foreign company on the ceramic packaging industry."

• The petitioners requested: (1) Government support for additional research and development leading to commercialization of advanced materials; (2) qualification assistance to enable domestic suppliers to participate on existing military programs being supplied with ceramic packages from Japan; and (3) any (additional) relief the President deems appropriate to stop the further deterioration of the U.S. ceramic package industry.

• By law, the Secretary of Commerce had 270 days from the date of initiation (in this case until August 16, 1993) in which to conduct an investigation and forward his findings and recommendations to the President.

Methodology

• Section 232(d) of the Act directs us to evaluate the "domestic production needed for projected national defense requirements, the capacity of domestic industries to meet such requirements, * * * the requirements of growth of such industries * * * including the investment * * * and development necessary to assure such growth, the importation of goods in terms of their quantities, availabilities, character, and use, * * * (and) the impact of foreign competition on the economic welfare of individual domestic industries," among other factors.

• Commerce conducted this investigation with assistance from the interagency community including the Departments of Defense (DOD), Energy, Justice, Labor, State and the Treasury; the Central Intelligence Agency; the Council of Economic Advisors; the National Aeronautics and Space Administration (NASA); the Office of Management and Budget; and the Office of the U.S. Trade Representative. Several of the government's leading experts in this technology took part including participants from: Commerce/National Institute of Standards and Technology (NIST); Defense/Naval Command, Control, and Ocean Surveillance Center; Energy/Sandia Lab; and NASA/Jet Propulsion Lab.

• The Department gathered further information by conducting separate surveys of ceramic package producers and ceramic package importer/end users. These surveys focused on such issues as: imports, production, financial condition, supplier qualification, research and development, investment, employment, complexity of defense products, alternative technologies, capacity constraints, and foreign sourcing/dependency.

• The Department received surveys from all identified U.S. producers and all identified direct importers, and secured additional surveys from a sampling of end users in the semiconductor, computer systems and defense systems industries.

• Additional information was gathered from public comments received in response to our **Federal Register** notice, on-the-record meetings held with interested parties, factory visits to five leading U.S. suppliers, and supplementary independent research.

The Product

• The four major functions of the ceramic package are: (1) To distribute electric power through and outside of the device; (2) to communicate signals through and outside of the device; (3) to dissipate heat; and (4) to protect the semiconductor die from potentially harmful elements of the ambient environment such as heat, moisture, and radiation.

• The value of ceramic packages may exceed 25 percent of the value of the integrated circuit. Packages increase in cost and importance as chips contain more information, operate faster and generate more heat.

• Most packages are custom-designed in an intimate collaboration between package manufacturer and customer. Most of the process is conducted in

clean room facilities to keep dust and other potential contaminants from adulterating the product.

• Both the complexity of design and difficulty of manufacturing semiconductor packages outstrip one's usual understanding of "packages" as being merely low-technology dispensable material. In their function, semiconductor packages are roughly comparable to a person's nervous system "interconnecting" the person's (or semiconductor device's) brain (or integrated circuit) with the rest of its system, as well as protecting its internal organs.

• Different package specifications are used depending upon the sophistication of the microchip housed in the package and on the device's intended use. One semiconductor producer reported to us, for example, that it employs over 100 different ceramic packages to house its various semiconductor products. Across the industry, there are many thousands of unique ceramic package products in use.

• Design and tooling costs, in particular, can be substantial. Comprehensive design capability is essential to the ultimate successful manufacture and use of the package. Green tape, the basic ceramic material, is another critical determinant of a company's capabilities and of the ultimate quality of its production. Each company's green tape formula is a closely-guarded secret consisting of a unique recipe of inputs and resulting in distinctive shrinkage during the subsequent firing process.

• In the basic production flow, after product design, green tape is produced on a tape casting machine or in rare instances, brought in from outside sources. Required holes are punched in the tape which are then filled with a conductive paste. The appropriate metallization pattern is screen-printed onto the tape, which is next laminated together with other tape if it is to be part of a multi-layer package. The single- or multi-layer tape sections are then fired at high temperature in a kiln. After firing, leads, pins and other external items are added, and gold or other protective coatings are affixed.

Importance of the Industry to National Security

• Ceramic semiconductor packages are a key component of the microelectronic element of virtually every military system. Survey respondents identified 113 distinct defense systems which require ceramic packages, and industry experts were unable to identify any system which does not include this product.

• Systems using ceramic packages include: The Patriot, Tomahawk, and Trident missiles; the Tacfire Artillery Fire Control System; the AEGIS radar; the Comanche Helicopter; the F–14 and F–18 aircraft, and the M1A1 Tank. In addition, ceramic packages are the medium of choice for latest-generation semiconductor products.

• Department of Commerce microelectronics industry experts and the Semiconductor Industry Association both estimate that direct and indirect military consumption account for approximately 20 percent of U.S. apparent consumption of ceramic packages. However, survey data show that defense users account for about 14 percent of U.S. apparent consumption of ceramic packages. This discrepancy can be accounted for by the lack of information available to package producers about the ultimate end use of some of their production.

• Virtually all producers and customers of ceramic packages state that it is extremely difficult to accurately estimate the percentage of ceramic packages they produce and/or use which ultimately go to defense end use. Reasons cited include: production of commercial and military products on the same line to identical specifications; use of commercial products for defense applications; and sale of semiconductors through distributors who do not report ultimate disposition to chip producers.

• Moreover, survey data show that imports account for 85 percent by value and 92 percent by units of all identifiable defense shipments. This finding is similar to that of a 1992 Department of Commerce study of sourcing patterns for three Naval weapon systems. That study found that ceramic packages exhibited the highest percentage foreign sourcing (in excess of 90 percent) for any of the hundreds of manufactured inputs into these systems.

Competitive Factors/Economic and Trade Data

• The 232 statute directs us to evaluate "the impact of foreign competition on the economic welfare of individual domestic industries * * * in determining whether such weakening of our internal economy may impair the national security."

• Domestic customers rate Japanese suppliers as superior on a wide range of competitive factors including: Breadth of product line, historical performance, quality and service.

• U.S.-owned firms' precarious competitive position is underscored by the economic and trade data. By virtually any measure, the U.S. ceramic package industry's performance has declined in recent years. Declines have occurred, for example, in profitability, production, capacity and capacity utilization, employment and other indicators.

• The eight domestic producers reporting lost $65 million in 1990 (20 percent of sales), lost an additional $96 million in 1991 (28 percent), and lost a further $90 million in 1992 (27 percent of sales). At least four of these eight firms were unprofitable for each of the three years of the survey period.

• Overall, U.S. production of ceramic packages declined 60 percent on a unit basis and 24 percent on a value basis between 1990 and 1992. The biggest declines occurred in high volume cerdip and cerpack product categories. Industry experts indicate that this trend is likely to continue.

• In 1992, the average capacity utilization rate (all firms, all types) was 52 percent on a unit basis. Capacity utilization of non-captive production was only 25 percent, however, and capacity utilization has sharply decreased in 1993 for the leading captive producer.

• In general, products in which U.S. production capacity had declined significantly had the highest capacity utilization rates, whereas products in which U.S. capacity had increased had low utilization rates. Capacity utilization rates in 1992 (unit basis) ranged from six percent for both chip carriers with less than 50 terminals and other area arrays to 85 percent for cerdip. By firm, capacity utilization in 1992 ranged from 16 to 81 percent.

• U.S. producers identified labor cost/training and tooling availability as the most important bottlenecks to ramping up to maximum production capacity.

• Surveyed firms reported that employment fell 21 percent from 1991 to 1992, and is expected to decrease an additional seven percent in 1993. Nevertheless, two companies reported having difficulty in acquiring skilled labor, in particular engineers with proper education and experience in the ceramic package process.

• Import penetration has increased, and concerns are heightened by the high degree of dependence (about two-thirds of consumption) on one foreign producer with a limited number of production facilities. The danger of dependence on such a concentrated supply can be illustrated by the worldwide scramble to obtain sufficient epoxy resin for plastic semiconductor packages resulting from the recent explosion at Sumitomo's plant in Ebimo, Japan.

• Following this explosion, epoxy resin prices have sharply increased. If alternative sources of supply are not found, Japanese companies or the Japanese government may allocate the limited supplies of epoxy resin. As a result, the availability of epoxy resin—a commodity taken for granted a few weeks ago—could become a pacing item which will determine companies' ability to produce and supply semiconductor devices.

• Should the supply of ceramic packages from the dominant foreign producer be disrupted for whatever reason, semiconductor companies would be unable to produce semiconductor devices requiring ceramic packages for either military or advanced commercial products.

• U.S. industry investment has remained at 20 percent or above of shipments during the survey period, exceeding the level in the overall U.S. semiconductor industry. U.S. industry investment is projected to drop precipitously in 1993, however, reflecting decreased activity by two key producers.

• Based on U.S. firms' production and capacity declines and their tenuous financial condition, officials from several leading U.S. firms have told us that their continued survival in the ceramic package business is uncertain. Corroborating this, leading U.S. government industry experts including those from the Navy, Energy/Sandia and Commerce/NIST believe that survival of the U.S.-owned companies is problematic. The Commerce/NIST and the Department of the Navy electronic package industry experts forecast, for example, that without government action, all U.S.-owned ceramic package producers will exit the business within three to five years.

• A major captive producer of ceramic packages has just recently begun to participate in the merchant market. The success of this company in commercial markets is as yet untested.

Government Policies and Trade Practices

• Most U.S. producers and importers did not report that they had experienced foreign government or company anticompetitive trade practices that had affected their companies' economic condition or hampered their ability to supply U.S. national security needs.

• Allegations were made by some companies, however, that foreign suppliers provide free up-front tooling, require bundling (must buy all or nothing from one supplier), and that foreign producers will not certify the location of manufacture in order to avoid "Buy America" provisions for some weapons systems. Further, one respondent reported that it had never been able to sell ceramic packages in Japan "despite repeated efforts" even at a time when no competitive Japanese industry yet existed.

• All ceramic package producers reported having to make some type of adjustment to their business practices to meet U.S. government policies. Most complained of increased operating costs resulting from environmental and defense procurement qualifications in particular. To alleviate this perceived competitive disadvantage, most producers recommended some type of increased government assistant—such as an R&D tax credit, and increased funding of DOD's Manufacturing Technology (MANTECH) program. Importers similarly emphasized the need to adjust to environmental and defense procurement policies.

National Security Production Capacity Issues

• As a result of the rapidly changing national security challenges facing this country, the Department of Defense is currently unable to identify its exact quantitative requirements for ceramic semiconductor packages during a national security emergency.

• DOD states "that it is important to maintain a national security capability to produce semiconductor ceramic packaging, particularly custom packages and those used in space applications and in heavily corrosive environments."

• Survey respondents reported closing eight U.S. production lines since January 1991. The total annual production capacity lost due to these closings was $354 million, representing 39 percent of U.S. production capacity. In addition, several U.S. producers exited the ceramic package market altogether in recent years.

• Four firms identified six planned increases in domestic production capacity slated for 1993 through 1996; all involve expansions to current facilities, rather than greenfield construction. These expansions will represent an additional $27 million of U.S. annual production capacity (less than three percent of the 1992 total).

• The leading foreign-owned supplier of ceramic packages operates a U.S. production facility, and also serves as distributor for its company's imported packages. In 1992, 88 percent of the units and 78 percent of the value of packages sold in the United States by this company were imported. In addition, for the packages built in this country, this supplier sources green tape—the critical unfired ceramic input—and precision tooling from its foreign parent and is similarly dependent on its parent for advanced design and R&D. This company was considered a reliable and high quality supplier by both commercial and defense customers.

National Security Technology Issues

• The manufacturing of ceramic semiconductor packages is a complex multi-step practice. The basic steps of the manufacturing process are well understood by several companies, any one of whom could produce a certain package given sufficient time and money. Only very few companies, however, have mastered the art of increasing manufacturing yields, and are able to reliably produce multiple copies of a given package at competitive cost within tight delivery time.

• Most surveyed firms confirmed that they do not lack access to technologies available to their foreign competition, but noted that it was difficult to compete with the major foreign competitor's market and financial clout.

• The DOD reported that while they are willing to use plastic semiconductor packages were feasible, a substantial number of ceramic packages will be required for DOD weapon systems for the indefinite future. DOD's continuing commitment to ceramic packages is demonstrated by the Advanced Research Projects Agency's funding of multi-chip module R&D.

• Commerce industry analysts further expect that there will continue to be demand for ceramics in high-end and next generation defense and commercial semiconductor products, and that net demand for ceramic packages will remain essentially unchanged in years to come.

• Ceramic package producers report that packages supplied for defense use are generally more complex than those supplied for commercial applications. While a minority of importer/end-users agree with this view, the majority state that defense packages are generally of equivalent complexity. Commerce industry analysts note that DOD is simultaneously a leading customer for older-generation technologies such as cerdip and a leading customer for next-generation technologies such as multi-chip modules and hybrids.

• Qualification of suppliers is generally performed by semiconductor and computer systems manufacturers, rather than by DOD. These companies reported that qualifying new suppliers did, on balance, require more time than qualifying existing suppliers for new packages. Reasons cited include: similarities between new and already

qualified packages, and familiarity with the supplier's manufacturing process.

- Commercial R&D expenditures by domestic producers were fairly stable from 1990 to 1992, but are forecast to decrease precipitously in 1993, falling 80 percent from $187 million to $37 million. This decrease is primarily accounted for by expected reductions by the two firms responsible for most industry R&D.
- Defense R&D expenditures have continued to increase over the survey period, increasing from $1.5 million in 1990 to a projected $8 million in 1993. Over this period, however, defense R&D has never represented more than 17 percent of industry R&D.
- Offshore production currently accounts for over 90 percent of defense end use ceramic packages. As noted above, without remedial action, government industry experts project that all remaining U.S.-owned producers will exit the industry within three to five years.
- This dependence on foreign sources is exacerbated by the fact that two-thirds of the packages consumed in the United States are provided by one foreign company. If there is a disruption of shipments from this one supplier, U.S. economic and national security could be at risk.

[FR Doc. 93–22374 Filed 9–13–93; 8:45 am]
BILLING CODE 3510–DT–M

International Trade Administration

[A–122–822]

Certain Corrosion-Resistant Carbon Steel Flat Products from Canada; Initiation of Changed Circumstances Antidumping Duty Administrative Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: September 14, 1993.

FOR FURTHER INFORMATION CONTACT: Stephen Jacques or Jean Kemp, Office of Agreements Compliance, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–3793.

INITIATION OF REVIEW: In accordance with section 751(b) of the Tariff Act of 1930, as amended (the Act), we are initiating a changed circumstances review of the antidumping duty order on certain corrosion-resistant carbon steel flat products from Canada. (*See* Antidumping Duty Orders: Certain Corrosion-Resistant Carbon Steel Flat Products and Certain Cut-to-Length Carbon Steel Plate from Canada, 58 FR 44162, August 19, 1993.)

On August 31, 1993, National Steel Corporation (National), a petitioner in the above-referenced case, filed a request for review pursuant to section 751(b) of the Act and 19 CFR 353.22(f). In the original investigation, the Department verified that DNN (a joint venture galvanizing facility which is owned by National, NKK Steel Corp. of Japan (NKK), and Dofasco, Inc. (Dofasco), a Canadian respondent in the investigation) did not have sales of this merchandise to the United States. In its request for a review, National presented evidence that DNN began producing corrosion-resistant carbon steel flat products for sale in the United States between the time of the end of the period of investigation and the time of our final determinations. Further, National has presented evidence indicating that DNN's operations involve galvanizing steel which is owned by its parent companies and at no time takes title to the steel (i.e. DNN is engaged in a "tolling" operation). Therefore, DNN may be improperly receiving, on its imports of tolled merchandise, a cash deposit rate based on untolled sales.

In accordance with 19 CFR 353.22(f)(1) and (3), the Department has determined these facts constitute sufficient good cause and changed circumstances to warrant initiating a changed circumstances review before the end of the second annual anniversary month of the antidumping duty order.

The Department will review information covering the period January 1, 1993, to June 30, 1993.

This notice is published in accordance with 19 CFR 353.22(f)(1)(i).

Dated: September 3, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93–22461 Filed 9–13–93; 8:45 am]
BILLING CODE 3510–DS–M

[A–729–801]

Final Determination of Sales at Less Than Fair Value; Ferrosilicon From Egypt

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: September 14, 1993.

FOR FURTHER INFORMATION CONTACT: Mary Jenkins or Brian Smith, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC, 20230, at (202) 482–1756 and (202) 482–1766, respectively.

FINAL DETERMINATION: The Department of Commerce (the Department) determines that ferrosilicon from Egypt is being, or is likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (the Act) (19 U.S.C. 1673d). The estimated margins are shown in the "Continuation of Suspension of Liquidation" section of this notice.

Case History

Since the publication of our affirmative preliminary determination on June 28, 1993 (58 FR 34564), the only event which has occurred is that petitioners submitted a case brief on August 10, 1993.

Scope of Investigation

The product covered by this investigation is ferrosilicon, a ferroalloy generally containing, by weight, not less than four percent iron, more than eight percent but not more than 96 percent silicon, not more than 10 percent chromium, not more than 30 percent manganese, not more than three percent phosphorous, less than 2.75 percent magnesium, and not more than 10 percent calcium or any other element.

Ferrosilicon is a ferroalloy produced by combining silicon and iron through smelting in a submerged-arc furnace. Ferrosilicon is used primarily as an alloying agent in the production of steel and cast iron. It is also used in the steel industry as a deoxidizer and a reducing agent, and by cast iron producers as an inoculant.

Ferrosilicon is differentiated by size and by grade. The sizes express the maximum and minimum dimensions of the lumps of ferrosilicon found in a given shipment. Ferrosilicon grades are defined by the percentages by weight of contained silicon and other minor elements. Ferrosilicon is most commonly sold to the iron and steel industries in standard grades of 75 percent and 50 percent ferrosilicon.

Calcium silicon, ferrocalcium silicon, and magnesium ferrosilicon are specifically excluded from the scope of this investigation. Calcium silicon is an alloy containing, by weight, not more than five percent iron, 60 to 65 percent silicon and 28 to 32 percent calcium. Ferrocalcium silicon is a ferroalloy containing by weight, not less than four percent iron, 60 to 65 percent silicon, and more than 10 percent calcium. Magnesium ferrosilicon is a ferroalloy

containing, by weight, not less than four percent iron, not more than 55 percent silicon, and not less than 2.75 percent magnesium.

Ferrosilicon is classifiable under the following subheadings of the Harmonized Tariff Schedule of the United States (HTSUS): 7202.21.1000, 7202.21.5000, 7202.21.7500, 7202.21.9000, 7202.29.0010, and 7202.29.0050. The HTSUS subheadings are provided for convenience and customs purposes. Our written description of the scope of this investigation is dispositive.

Period of Investigation

The period of investigation (POI) is July 1, 1992, through December 31, 1992.

Best Information Available (BIA)

We have determined, in accordance with section 776(c) of the Act, that the use of BIA is appropriate for sales of the subject merchandise in this investigation. In deciding to use BIA, section 776(c) provides that the Department may take into account whether the respondent was able to produce information requested in a timely manner and in the form required. In this case, the exporter of ferrosilicon from Egypt, the Egyptian Ferroalloy Company (EFACO), did not respond to any request for information.

As BIA, we are assigning the highest margin among the margins in the petition, in accordance with the two-tiered BIA methodology under which the Department imposes the most adverse rate upon those respondents who refuse to cooperate or otherwise significantly impede the proceeding, and as outlined in the Final Determinations of Sales at Less than Fair Value: Antifriction Bearings (Other Than Tapered Roller Bearings and Parts Thereof from the Federal Republic of Germany, Italy, Japan, Romania, Sweden, Thailand, and the United Kingdom (54 FR 18992, 19033, May 3, 1989); and as upheld in Krupp Stahl AG. et al v. U.S., Slip Op. 93–84 (CIT May 24, 1993).

Continuation of Suspension of Liquidation

In accordance with section 733(d)(1) (19 U.S.C. 1673b(d)(1)) of the Act, we are directing the U.S. Customs Service to continue to suspend liquidation of all entries of ferrosilicon from Egypt, as defined in the "Scope of Investigation" section of this notice, that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the Federal Register.

The Customs Service shall require a cash deposit or posting of a bond equal to the estimated margin amount by which the foreign market value of the subject merchandise exceeds the United States price as shown below. The suspension of liquidation will remain in effect until further notice.

Manufacturer/producer/exporter	Weighted average margin percent
The Egyptian Ferroalloy Company	90.50
All Others	90.50

International Trade Commission (ITC) Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination.

Notification to Interested Parties

This notice also serves as the only reminder to parties subject to administrative protective order (APO) of their responsibility covering the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 353.35(d). Failure to comply is a violation of the APO. See 19 CFR 353.35(e).

This notice is published pursuant to section 735(d) of the Act and (19 U.S.C. 1673d(d)) and 19 CFR 353.20(a).

Dated: September 7, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93–22462 Filed 9–13–93; 8:45 am]

BILLING CODE 3510–DS–P

[C–535–001]

Cotton Shop Towels From Pakistan; Final Results of Countervailing Duty Administrative Review

AGENCY: International Trade Administration/Import Administration, Department of Commerce.

ACTION: Notice of Final Results of Countervailing Duty Administrative Review.

SUMMARY: On June 8, 1993, the Department of Commerce published the preliminary results of its administrative review of the countervailing duty order on cotton shop towels from Pakistan. We have now completed that review and determine the net subsidy to be 12.46 percent *ad valorem* during the period January 1, 1991 through December 31, 1991.

EFFECTIVE DATE: September 14, 1993.

FOR FURTHER INFORMATION CONTACT: Patricia W. Stroup or Maria MacKay, Office of Countervailing Compliance, International Trade Administration, U.S. Department of Commerce, Washington, DC 20230; telephone: (202) 482–0983.

SUPPLEMENTARY INFORMATION:

Background

On June 8, 1993, the Department of Commerce (the Department) published in the **Federal Register** (58 FR 32104) the preliminary results of its administrative review of the countervailing duty order on cotton shop towels from Pakistan (49 FR 8974; March 9, 1984). The Department has now completed that administrative review in accordance with section 751 of the Tariff Act of 1930, as amended (the Act).

Scope of Review

Imports covered by this review are shipments of Pakistani cotton shop towels. This merchandise is classifiable under item number 6307.10.20 of the Harmonized Tariff Schedule (HTS). The HTS item number is provided for convenience and Customs purposes. The written description remains dispositive.

The review covers the period January 1, 1991 through December 31, 1991, and five programs:

(1) Export Financing;
(2) Excise Tax, Sales Tax and Customs Duty Rebate;
(3) Income Tax Reduction;
(4) Import Duty Rebate; and
(5) Export Credit Insurance.

Analysis of Comments Received

We gave interested parties an opportunity to comment on the preliminary results. We received no comments.

Final Results of Review

As a result of our review, we determine the net subsidy to be 12.46 percent *ad valorem* for all firms during the period January 1, 1991 through December 31, 1991.

Therefore, the Department will instruct the Customs Service to assess countervailing duties of 12.46 percent of the f.o.b. invoice price on all shipments of this merchandise exported on or after January 1, 1991 and on or before December 31, 1991. The Department will also instruct the Customs Service to collect a cash deposit of estimated countervailing duties of 12.46 percent of the f.o.b. invoice price on all shipments of the subject merchandise from Pakistan entered, or withdrawn from warehouse, for consumption on or after

the date of publication of this notice. This deposit requirement shall remain in effect until publication of the final results of the next administrative review.

This administrative review and notice are in accordance with section 751(a)(1) of the Act (19 U.S.C. 1675(a)(1)) and 19 CFR 355.22.

Dated: September 7, 1993.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93–22463 Filed 9–13–93; 8:45 am]

BILLING CODE 3510-DS-P

National Oceanic and Atmospheric Administration

Marine Mammals

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.

ACTION: Notice of correction regarding application for a scientific research permit to take marine mammals (P397A).

SUMMARY: This notice corrects an omission in the final sentence of the second paragraph of the supplementary information section of a notice previously published in the **Federal Register** on August 31, 1993 (58 FR 45881). This sentence is revised as follows:

The proposed activities will be conducted in Hawaiian and Alaskan waters over a 5-year period.

ADDRESSES: The application and related documents are available for review upon written request or by appointment in the following office(s): Permits Division, Office of Protected Resources, NMFS, 1335 East-West Highway, room 7324, Silver Spring, MD 20910 (301/713–2289);

Director, Alaska Region, NMFS, 709 West 9th Street, Federal Building, Juneau, AK 99802 (909/586–7233); and

Director, Southwest Region, NMFS, 501 West Ocean Boulevard, suite 4200, Long Beach, CA 90802–4213 (310/980–4016).

Dated: September 8, 1993.

William W. Fox, Jr.,

Director, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 93–22367 Filed 9–13–93; 8:45 am]

BILLING CODE 3510-22-M

COMMITTEE FOR THE IMPLEMENTATION OF TEXTILE AGREEMENTS

Extension of an Import Limit for Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in Oman

September 8, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner of Customs extending a limit.

EFFECTIVE DATE: September 21, 1993.

FOR FURTHER INFORMATION CONTACT: Jennifer Tallarico, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–4212. For information on the quota status of this limit, refer to the Quota Status Reports posted on the bulletin boards of each Customs port or call (202) 927–5850. For information on embargoes and quota re-openings, call (202) 482–3715. For information on categories on which consultations have been requested, call (202) 482–3740.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

The United States Government has decided to continue the restraint limit on Categories 340/640 for an additional twelve-month period, beginning on September 21, 1993 and extending through September 20, 1994. Overshipments of the limit for the period ending September 20, 1993 will be charged to the restraint limit for the period beginning September 21, 1993, as they are entered. As a result, the limit for the period September 21, 1993 through September 30,1994 may close at opening. Overshipments of the limit for the period ending September 20, 1993, totalling 84,778 dozen, will be charged against the new limit for Oman 340/640 at opening on September 21, 1993.

The United States remains committed to finding a solution concerning these categories. Should such a solution be reached in consultations with the Government of Oman, further notice will be published in the **Federal Register**.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992). Also see 57 FR 56329, published on November 27, 1992; and 53 FR 12029, published on March 2, 1993.

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

September 8, 1993.

Commissioner of Customs,

Department of the Treasury, Washington, DC 20229.

Dear Commissioner: Under the terms of section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854); and in accordance with the provisions of Executive Order 11651 of March 3, 1972, as amended, you are directed to prohibit, effective on September 21, 1993, entry into the United States for consumption and withdrawal from warehouse for consumption of cotton and man-made fiber textile products in Categories 340/640, produced or manufactured in Oman and exported during the twelve-month period beginning on September 21, 1993 and extending through September 20, 1994, in excess of 110,826 dozen.

Imports charged to this category limit for the period September 21, 1992 through September 20, 1993 shall be charged against the level of restraint to the extent of any unfilled balance. Goods in excess of that limit shall be subject to the limit established in this directive.

In carrying out the above directions, the Commissioner of Customs should construe entry into the United States for consumption to include entry for consumption into the Commonwealth of Puerto Rico.

The Committee for the Implementation of Textile Agreements has determined that this action falls within the foreign affairs exception of the rulemaking provisions of 5 U.S.C. 553(a)(1).

Sincerely,

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–22458 Filed 9–13–93; 8:45 am]

BILLING CODE 3510-DR-F

Amendment of Import Limits, Restraint Periods and Visa Requirements for Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in Pakistan

September 8, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner of Customs amending limits, restraint periods and visa requirements.

EFFECTIVE DATE: September 15, 1993.

FOR FURTHER INFORMATION CONTACT: Anne Novak, International Trade Specialist, Office of Textiles and

Apparel, U.S. Department of Commerce, (202) 482–4212. For information on the quota status of these limits, refer to the Quota Status Reports posted on the bulletin boards of each Customs port or call (202) 927–6714. For information on embargoes and quota re-openings, call (202) 482–3715.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

In a Memorandum of Understanding (MOU) dated August 19, 1993, the Governments of the United States and Pakistan agreed to increase the current specific limit for Category 219 and establish specific limits for Categories 314, 334/634 and 335/635 for the 1993 agreement year.

In the letter published below, the Chairman of CITA directs the Commissioner of Customs to amend the existing limits and restraint periods for the new restraint period beginning on January 1, 1993 and extending through December 31, 1993. Also, the existing visa requirements are being amended to include coverage of merged Categories 334/634 and 335/635.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992). Also see 48 FR 25257, published on June 6, 1983; 57 FR 56904, published on December 1, 1992; 58 FR 15486, published on March 23, 1993; 58 FR 19656, published on April 15, 1993; 58 FR 33085, published on June 15, 1993; 58 FR 33259, published on June 16, 1993; and 58 FR 33257, published on June 16, 1993.

The letter to the Commissioner of Customs and the actions taken pursuant to it are not designed to implement all of the provisions of the MOU, but are designed to assist only in the implementation of certain of its provisions.

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

September 8, 1993.

Commissioner of Customs,
Department of the Treasury, Washington, DC 20229.

Dear Commissioner: This directive amends, but does not cancel, the directives issued to you on November 25, 1992, as amended (April 9, 1993; June 9, 1993; and June 10, 1993), and March 18, 1993, by the Chairman, Committee for the Implementation of Textile Agreements. Those directives concern imports of certain cotton and man-made fiber textile products, produced or manufactured in Pakistan and exported during 1993.

Effective on September 15, 1993, you are directed, pursuant to a Memorandum of Understanding dated August 19, 1993 between the Governments of the United States and Pakistan, to amend the restraint periods for Categories 314 (March 28, 1993 through June 25, 1993; June 26, 1993 through December 31, 1993), 334/634 (February 28, 1993 through May 28, 1993; May 29, 1993 through December 31, 1993) and 335/635 (May 26, 1993 through August 23, 1993) for a new restraint period beginning on January 1, 1993 and extending through December 31, 1993. Categories 314, 334 and 335 shall no longer be subject to the group limit. Import charges shall be retained and applied to the new limits established for the January 1, 1993 through December 31, 1993 restraint period.

Also effective on September 15, 1993, you are directed to amend the limits for the following categories, pursuant to the August 19, 1993 MOU:

Category	Twelve-month restraint limit [1]
219	5,500,000 square meters.
314	4,000,000 square meters.
334/634	158,000 dozen.
335/635	244,000 dozen.

[1] The limits have not been adjusted to account for any imports exported after December 31, 1992.

You are directed to charge the following amounts to Categories 634 and 635 for the import periods listed below:

Category	Amount to be charged	Import period
634	5,247 dozen	Jan. 1–Feb. 27, 1993.
	272 dozen	May 29–June 16, 1993.
635	53,231 dozen	Jan. 1–May 25, 1993.
	2,726 dozen	May 26–June 16, 1993.

For visa purposes, you are directed, effective on September 15, 1993, to amend further the directive dated May 27, 1983 to include coverage of merged Categories 334/634 and 335/635 for goods produced or manufactured in Pakistan and exported from Pakistan on and after September 15, 1993.

Merchandise in merged Categories 334/634 and 335/635 may be accompanied by either the appropriate merged category visa or the correct category visa corresponding to the actual shipment.

Shipments entered or withdrawn from warehouse according to this directive which are not accompanied by an appropriate export visa shall be denied entry and a new visa must be obtained.

The Committee for the Implementation of Textile Agreements has determined that these actions fall within the foreign affairs exception to the rulemaking provisions of 5 U.S.C. 553(a)(1).

Sincerely,

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–22460 Filed 9–13–93; 8:45 am]

BILLING CODE 3510–DR–F

Extension of an Import Limit for Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in Qatar

September 8, 1993.

AGENCY: Committee for the Implementation of Textile Agreements (CITA).

ACTION: Issuing a directive to the Commissioner of Customs extending a limit.

EFFECTIVE DATE: September 24, 1993.

FOR FURTHER INFORMATION CONTACT: Jennifer Tallarico, International Trade Specialist, Office of Textiles and Apparel, U.S. Department of Commerce, (202) 482–4212. For information on the quota status of this limit, refer to the Quota Status Reports posted on the bulletin boards of each Customs port or call (202) 927–5850. For information on embargoes and quota re-openings, call (202) 482–3715. For information on categories on which consultations have been requested, call (202) 482–3740.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March 3, 1972, as amended; section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854).

The United States Government has decided to continue the restraint limit on Categories 341/641 for an additional twelve-month period, beginning on September 24, 1993 and extending through September 23, 1994.

The United States remains committed to finding a solution concerning these categories. Should such a solution be reached in consultations with the Government of Qatar, further notice will be published in the **Federal Register**.

A description of the textile and apparel categories in terms of HTS numbers is available in the CORRELATION: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States (see **Federal Register** notice 57 FR 54976, published on November 23, 1992). Also

see 57 FR 54222, published on November 17, 1992.

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

Committee for the Implementation of Textile Agreements

September 8, 1993.

Commissioner of Customs,
Department of the Treasury, Washington, DC 20229.

Dear Commissioner: Under the terms of section 204 of the Agricultural Act of 1956, as amended (7 U.S.C. 1854); and in accordance with the provisions of Executive Order 11651 of March 3, 1972, as amended, you are directed to prohibit, effective on September 24, 1993, entry into the United States for consumption and withdrawal from warehouse for consumption of cotton and man-made fiber textile products in Categories 341/641, produced or manufactured in Qatar and exported during the twelve-month period beginning on September 24, 1993 and extending through September 23, 1994, in excess of 106,094 dozen.

Imports charged to this category limit for the period September 24, 1992 through September 23, 1993 shall be charged against the level of restraint to the extent of any unfilled balance. Goods in excess of that limit shall be subject to the limit established in this directive.

In carrying out the above directions, the Commissioner of Customs should construe entry into the United States for consumption to include entry for consumption into the Commonwealth of Puerto Rico.

The Committee for the Implementation of Textile Agreements has determined that this action falls within the foreign affairs exception of the rulemaking provisions of 5 U.S.C. 553(a)(1).

Sincerely,

D. Michael Hutchinson,

Acting Chairman, Committee for the Implementation of Textile Agreements.

[FR Doc. 93–22459 Filed 9–13–93; 8:45 am]

BILLING CODE 3510-DR-F

DEPARTMENT OF DEFENSE

Department of the Army

Office of the Secretary of the Army; Notice of Intent To Prepare Environmental Impact Analyses for Base Realignment Actions

AGENCY: Department of the Army, DOD.

ACTION: Notice of intent.

SUMMARY: The Defense Base Closure and Realignment Commission was mandated by Public Law 101–510, the Defense Base Closure and Realignment Act of 1990, to recommend military installations for realignment and closure. The Commission's recommendations were included in their 1993 report which was presented to the President on July 1, 1993. The President approved the Commission's recommendations and they were forwarded to the Congress on July 2, 1993. Public Law 101–510 exempted the decisionmaking process of the Commission in recommending installations to be closed or realigned from the provisions of the National Environmental Policy Act of 1969. However, the Department of the Army must still prepare environmental impact analyses to assess the environmental effects of realignment on installations receiving functions from other installations and on installations subject to property disposal. These analyses will include the cumulative effects of these and other actions impacting the installation during the same timeframe.

FOR FURTHER INFORMATION CONTACT: Please contact the Public Affairs Office of the affected installation for further information regarding these environmental impact analyses.

SUPPLEMENTARY INFORMATION: The Army intends to prepare environmental impact analyses to assess the environmental effects of the actions listed below. The public will have an opportunity to comment on these analyses before any action is taken to implement these realignment/disposal actions.

A. Detroit Arsenal, Michigan, receiving: Elements from the Belvoir Research and Development Center, Fort Belvoir, Virginia.

B. Fort Jackson, South Carolina, receiving: Chaplain School from Fort Monmouth, New Jersey.

C. Fort Monmouth, New Jersey, receiving: Program Executive Office (PEO), Research, Development, and Engineering Center (RDEC), and material management elements from Vint Hill Farms Station, Virginia, as well as tenants of the Evans Subpost and the leased CECOM office building in Tinton Falls, New Jersey.

D. Fort Monmouth, New Jersey, disposal: Excess facilities and real property at main post and Charles Wood Subpost; all facilities and real property at Evans Subpost.

E. Letterkenny Army Depot, Pennsylvania, receiving: Depot-level tactical missile maintenance workload of the Department of Defense.

F. Red River Army Depot, Texas, receiving: Depot maintenance workload from Tooele Army Depot, Utah.

G. Tobyhanna Army Depot, Pennsylvania, receiving: Depot maintenance workload from Tooele Army Depot, Utah, and the maintenance and repair functions of the Intelligence Materiel Management Center, Vint Hill Farms Station, Virginia.

H. Tooele Army Depot, Utah, disposal: Excess facilities and real property not required to support the conventional and chemical munitions mission.

I. Vint Hill Farms Station, Virginia, disposal: All facilities and real property.

Dated: September 8, 1993.

Lewis D. Walker,

Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health OASA (IL&E).

[FR Doc. 93–22467 Filed 9–13–93; 8:45 am]

BILLING CODE 3710-08-M

DEPARTMENT OF EDUCATION

Office of Special Education and Rehabilitative Services

[CFDA No.: 84.180A]

Technology, Educational Media, and Materials for Individuals With Disabilities Program; Inviting Applications for New Awards for Fiscal Year (FY) 1994

Purpose of Program: To support projects and centers for advancing the availability, quality, use, and effectiveness of technology, educational media, and materials in the education of children and youth with disabilities and the provision of early intervention services to infants and toddlers with disabilities.

This notice supports the National Education Goals by improving understanding of how to enable children and youth with disabilities to reach higher levels of academic achievement.

Eligible Applicants: Institutions of higher education, State and local educational agencies, public agencies, and private nonprofit or for-profit organizations.

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 75, 77, 79, 80, 81, 82, 85, and 86; and (b) The regulations for this program in 34 CFR part 333.

Applications Available: October 29, 1993.

Deadline for Transmittal of Applications: January 7, 1994.

Deadline for Intergovernmental Review: March 9, 1994.

Available Funds: $1,250,000.

Estimated Average Size of Awards: $250,000 for the first 12 months of the projects. Multi-year projects are likely to be level funded unless there are increases in costs attributable to significant changes in activity level.

Estimated Number of Awards: 5.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 36 months.

Priority: The priority Organizational Support and Professional Development in the Use of Technology, media, and Materials with Children and Youth with Disabilities in the notice of final priority for this program, published elsewhere in this issue of the **Federal Register** applies to this competition.

For Technical Information Contact: Dr. David Malouf, U.S. Department of Education, 400 Maryland Avenue, SW., room 3521, Switzer Building, Washington, DC 20202–2640. Telephone: (202) 205–8111. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m. Eastern time, Monday through Friday.

For Applications and General Information Contact: Requests for applications and general information should be addressed to: Darlene Crumblin, U.S. Department of Education, 400 Maryland Avenue, SW., room 3525, Switzer Building, Washington, DC 20202–2641. Telephone: (202) 205–9864.

Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m. Eastern time, Monday through Friday.

Program Authority: 20 U.S.C. 1461.

Dated: September 9, 1993.

Andrew Pepin,

Acting Assistant Secretary, Office of Special Education and Rehabilitative Services.

[FR Doc. 93–22435 Filed 9–13–93; 8:45 am]

BILLING CODE 4000–01–M

[CFDA No.: 84.078C]

Postsecondary Education Programs for Individuals With Disabilities; Inviting Application for New Awards for Fiscal Years (FY) 1994 and 1995

Purpose of Program: To provide assistance for the development, operation, and dissemination of specially designed model programs of postsecondary, vocational, technical, continuing, or adult education for individuals with disabilities.

This notice supports National Education Goal 5 by assisting students with disabilities in developing competitive workplace skills through improved services and better trained service providers.

Eligible Applicants: State educational agencies, institutions of higher education, junior and community colleges, vocational and technical institutions, and other appropriate nonprofit educational agencies.

Deadline for Transmittal of Applications: February 4, 1994.

Deadline for Intergovernmental Review: April 4, 1994.

Applications Available: October 20, 1993.

Available Funds: $700,000.

Estimated Range of Awards: $90,000–110,000.

Estimated Size of Awards: $100,000.

Estimated Number of Awards: 7.

Note: The Department is not bound by any estimates in this notice.

Project Period: Up to 36 months.

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 75, 77, 79, 80, 81, 82, 85, and 86; and (b) The regulations for this program in 34 CFR part 338.

Priority: The priority in the notice of final authority for this program, as published elsewhere in this issue of the **Federal Register** applies to this competition.

For Applications: To request an application, telephone (202) 205–8485.

For Further Information Contact: Joseph Clair, U.S. Department of Education, 400 Maryland Avenue, SW., room 4622, Switzer Building, Washington, DC 20202–2644. Telephone: (202) 205–9503.

Individuals who use a telecommunications device for the deaf (TDD) may call the TDD number at (202) 205–8170.

Program Authority: 20 U.S.C. 1424a.

Dated: September 9, 1993.

Judith E. Heumann,

Assistant Secretary, Office of Special Education and Rehabilitative Services.

[FR Doc. 93–22437 Filed 9–13–93; 8:45 am]

BILLING CODE 4000–01–M

DEPARTMENT OF ENERGY

Office of Hearings and Appeals

Cases Filed During the Week of August 6 Through August 13, 1993

During the Week of August 6 through 13, 1993, the appeal and the applications for other relief listed in the Appendix to this Notice were filed with the Office of Hearings and Appeals of the Department of Energy.

Under DOE procedural regulations, 10 CFR part 205, any person who will be aggrieved by the DOE action sought in these cases may file written comments on the application within ten days of service of notice, as prescribed in the procedural regulations. For purposes of the regulations, the date of service of notice is deemed to be the date of publication of this Notice or the date of receipt by an aggrieved person of actual notice, whichever occurs first. All such comments shall be filed with the Office of Hearings and Appeals, Department of Energy, Washington, D.C. 20585.

Dated: September 3, 1993.

George B. Breznay,

Director, Office of Hearings and Appeals.

LIST OF CASES RECEIVED BY THE OFFICE OF HEARINGS AND APPEALS

[Week of August 6 through August 13, 1993]

Date	Name and Location of Applicant	Case No.	Type of Submission
Aug. 9, 1993 ...	Farmers Union Elevator Company, Moundridge, KS.	RR272–110	Request for Modification/Rescission in the Crude Oil Refund Proceeding. If granted: The June 8, 1993 Decision and Order (Case No. RF272–81889) issued to Farmers Union Elevator Company would be modified regarding the firm's application for refund submitted in the Crude Oil Refund Proceeding.
Aug. 11, 1993 .	Sandia National Laboratories, Albuquerque, NM.	LWZ–0021	Interlocutory Order. If granted: The request for a hearing by an alleged whistleblower, Ronald Sorri (Case No. LWA–0001) would be dismissed.

LIST OF CASES RECEIVED BY THE OFFICE OF HEARINGS AND APPEALS—Continued

[Week of August 6 through August 13, 1993]

Date	Name and Location of Applicant	Case No.	Type of Submission
Aug. 12, 1993 .	Department of Veteran Affairs, Washington, D.C..	RR272–111	Request for Modification/Rescission in the Crude Oil Refund Proceeding. If granted: The July 13, 1993 Decision and Order (Case No. RF272–89357) issued to the Department of Veteran Affairs would be modified regarding the state's application for refund submitted in the Crude Oil Refund Proceeding.
Aug. 12, 1993 .	Milton L. Loeb, Albuquerque, NM	LFA–0313	Appeal of an Information Request Denial. If granted: The July 12, 1993 Freedom of Information Request Denial issued by the Albuquerque Field Office would be rescinded, and Milton L. Loeb would receive access to computer software used by the Department of Energy.

REFUND APPLICATIONS RECEIVED

[Week of August 6 Through August 13, 1993]

Date received	Name of refund proceeding/name of refund applicant	Case No.
8/5/93	ELI'S Texaco Service Center	RF321–19833
8/5/93	Walnut Creek Gulf	RF300–21751
8/5/93	Ashland Chemical, Inc.	RF351–6
8/6/93	Arthur Kelley's Texaco #2	RF321–19834
8/9/93	Mobil Chemical Company	RF351–7
8/10/93	Dameron's Texaco	RF321–19835
8/10/93	Bonnie's Grocery	RF346–58
8/10/93	Rayne Canal Station	RF346–59
8/10/93	Canal Econo Center	RF346–60
8/10/93	Loreauville Canal Service	RF346–61
8/10/93	Moss Street Canal	RF346–62
8/10/93	Latio Lais Canal Station	RF346–63
8/10/93	Bertrand Canal Service Station	RF346–64
8/10/93	Rochon's Comm. Canal & Grocery	RF346–65
8/6/93 thru 8/13/93.	Atlantic Richfield Refund, Applications Received	RF304–14339 thru RF304–14380
8/6/93 thru 8/13/93.	Crude Oil Refund, Applications Received	RF272–94830 thru RF272–94840

[FR Doc. 93–22456 Filed 9–13–93; 8:45 am]

BILLING CODE 6450–01–P

Finding of No Significant Impact; Consolidation of the Nonnuclear Component Within the Nuclear Weapons Complex

AGENCY: Department of Energy.

ACTION: Finding of no significant impact.

SUMMARY: The Department of Energy (DOE) issues this Finding of No Significant Impact (FONSI) on its proposal to consolidate certain nonnuclear component manufacturing, surveillance, and storage functions of the Nation's Nuclear Weapons Complex (Complex). This finding is based on the DOE "Nonnuclear Consolidation Environmental Assessment" (EA), DOE/EA–0792, June 1993, which analyzes the proposed consolidation of these nonnuclear functions that DOE performs in the Complex. The DOE sites involved in the nonnuclear consolidation proposal are the Kansas City Plant (KCP) in Kansas City, Missouri; Los Alamos National Laboratory (LANL) in Los Alamos, New Mexico; the Mound Plant (Mound) in Miamisburg, Ohio; the Y–12 Plant in Oak Ridge, Tennessee; the Pinellas Plant (Pinellas) in Largo, Florida; the Rocky Flats Plant (RFP) in Golden, Colorado; Sandia National Laboratories, New Mexico (SNL/NM) in Albuquerque, New Mexico; and the Savannah River Site (SRS) near Aiken, South Carolina. DOE's proposed action is to consolidate certain nonnuclear manufacturing activities at KCP, relocate others to SRS, LANL, and SNL/NM, and close out the Complex missions at Mound and Pinellas, and Complex nonnuclear missions at RFP. The proposed action responds to Presidential initiatives, including the START II Treaty, to reduce the Nation's nuclear weapons stockpile, and is expected to achieve more efficient and effective management of nonnuclear functions within the Complex, while also decreasing the long-term operating costs of this aspect of the Complex. The proposed action is part of DOE's larger proposal to reconfigure the entire Complex. The remainder of this reconfiguration proposal is being analyzed in the Nuclear Weapons Complex Reconfiguration Programmatic Environmental Impact Statement (PEIS).

Based on the analyses in the EA, DOE issued a proposed FONSI on July 8, 1993, for a 30-day public review period. Twenty-nine documents were received from the public which provided comments on the proposed FONSI and EA. The comments addressed several topics including: DOE's interpretation of the National Environmental Policy Act of 1969 (NEPA) requirements (i.e., whether an EA or environmental impact statement (EIS) was appropriate for the proposed action); existing waste management and cleanup activities at the DOE facilities; socioeconomic and community issues; DOE's mission as it relates to changing world events; and the risks due to consolidation from natural and manmade threats. The U.S. Environmental Protection Agency also reviewed the EA and proposed FONSI and submitted comments concerning

waste management at the Y–12 Plant and the Savannah River Site. The Kansas City Regional Office of the Department of Housing and Urban Development stated in its comment letter that "* * * no apparent adverse impacts were noted relating to Housing and Urban Development projects in this jurisdiction." The U.S. Fish and Wildlife Service, Albuquerque Regional Office, indicated that no federally listed endangered and threatened species would be affected and that review of contamination issues would not result in significant impacts in New Mexico; the Service therefore concurred with the proposed FONSI. No other Federal agencies responded.

DOE has reviewed the comments received and has concluded that no new information has been made available which would change the determination that the proposed action does not constitute a major Federal action within the meaning of NEPA, 42 U.S.C. 4321 *et seq.* Therefore, an EIS is not required and incorporation of the analysis of the proposed nonnuclear consolidation into the Reconfiguration PEIS is not necessary. A summary of the comments received, and DOE's response, is provided in the Attachment to this FONSI.

COPIES OF THE EA AND FONSI: Copies of the EA and FONSI are available from: Howard R. Canter, U.S. Department of Energy, Weapons Complex Reconfiguration Office, DP–40, 1000 Independence Avenue SW., Washington, DC 20585.

The FONSI, EA and related documents are also available for public review at the DOE public reading rooms listed below.

California

U.S. Department of Energy, San Francisco Operations Office, 1301 Clay Street, room 700N, Oakland, California 94612 (510) 637–1762

Colorado

U.S. Department of Energy, Rocky Flats Public Reading Room, Front Range Community College Library, 3645 West 12th Avenue, Westminster, Colorado 80030 (303) 469–4435

Florida

U.S. Department of Energy, Public Reading Room, Largo Public Library 351 East Bay Drive, Largo, Florida 34640 (813) 587–6715

Idaho

U.S. Department of Energy, Idaho Operations Office, Public Reading Room, 1776 Science Center Drive, Idaho Falls, Idaho 83402 (208) 526–9162

Nevada

U.S. Department of Energy, Nevada Operations Office, 2753 South Highland Drive, Las Vegas, Nevada 89193 (702) 295–1274

Ohio

U.S. Department of Energy, Miamisburg Library, DOE Public Reading Room, 35 South Fifth Street, Miamisburg, Ohio 45342 (513) 866–1071

South Carolina

U.S. Department of Energy Reading Rm., University of South Carolina, Aiken Campus, 171 University Parkway, Aiken, South Carolina 29801 (803) 641–3320

Tennessee

U.S. Department of Energy, Oak Ridge Operations Office, Freedom of Information Officer, 200 Administration Road, room G–209, Oak Ridge, Tennessee 37831 (615) 576–5765

Illinois

U.S. Department of Energy, Chicago Operations Office, 9800 South Cass Avenue, Argonne, Illinois 60439 (708) 972–2010

Missouri

U.S. Department of Energy, Public Reading Room, Red Bridge Branch, Mid-Continent Public Library, 11140 Locust Street, Kansas City, Missouri 64137 (816) 942–1780

New Mexico-Albuquerque

U.S. Department of Energy, Public Reading Room, National Atomic Museum, 20358 Wyoming SE, Albuquerque, New Mexico 87185 (505) 845–6670/4378

New Mexico-Los Alamos

Los Alamos National Laboratory, Community Reading Room, 1450 Central Avenue, suite 101, Los Alamos, New Mexico 87545 (505) 665–2127

Texas

U.S. Department of Energy, Lynn Library/ Learning Center, Amarillo College, 2201 South Washington Street, Amarillo, Texas 79109 (806) 371–5400

Washington

U.S. Department of Energy, Richland Operations Office, 100 Sprout Road, Richland, Washington 99352 (509) 376–8583

District of Columbia

U.S. Department of Energy, Freedom of Information Reading Room, Forrestal Building, room 1E–90, 1000 Independence Avenue SW., Washington, D.C. 20585 (202) 586–6020

For information on the availability of specific documents and hours of operation, please contact reading rooms at the telephone numbers provided.

FOR FURTHER INFORMATION CONTACT: Requests for further information on the proposed project or the Nuclear Weapons Complex Reconfiguration Program should be sent to: Howard R. Canter, U.S. Department of Energy, Weapons Complex Reconfiguration Office, DP–40, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586–1300.

For general information on the DOE NEPA review process, contact: Carol M. Borgstrom, U.S. Department of Energy, Office of NEPA Oversight (EH–25), 1000 Independence Avenue, SW., Washington, D.C. 20585, (202) 586–4600 or (800) 472–2756.

SUPPLEMENTARY INFORMATION: On December 16, 1991, the then Secretary of Energy announced his decision to prepare an EA for the consolidation of nonnuclear functions of the Complex. The public notice regarding the Secretary's decision was published on January 27, 1992 (57 FR 3046). The nonnuclear consolidation proposal is based upon the DOE Nonnuclear Consolidation Plan (NCP), September 1991, as amended. The NCP also provided the basis for determining the consolidation alternatives analyzed in the EA. DOE determined that the proposal to consolidate nonnuclear facilities could be analyzed in an EA prior to completion of the Reconfiguration PEIS (see 40 CFR 1506.1(c)) because (1) there are significant benefits for the Nation from nonnuclear consolidation, i.e., cost savings and preservation of technical competence, whether the rest of the Complex is reconfigured or not, and (2) decisions regarding nonnuclear consolidation will neither affect nor be affected by decisions to be made following the completion of the Reconfiguration PEIS.

A pre-approval review copy of the EA was sent to affected states and Indian Tribes for comment in December 1992. Comments received during the review period were taken into account in preparing the final EA. Appendix G of the EA contains all comments received and DOE responses.

As required by the Energy and Water Development Appropriations Act, 1993 and the National Defense Authorization Act for Fiscal Year 1993, DOE also prepared and submitted to Congress the Nonnuclear Reconfiguration Cost Effectiveness Report (CER) on January 15, 1993. Each of three independent consultants, appointed by Energy Secretary Hazel R. O'Leary to review the CER and accompanying certifications, confirmed on May 25, 1993, that the proposed consolidation is cost effective and would not increase the technological, environmental, safety, or health risks associated with Departmental activities. Their review and conclusions did not result in any changes to the proposed nonnuclear consolidation proposal, and the

Secretary made the decision to proceed with the Nonnuclear Consolidation process.

Proposed Action

DOE proposes to terminate the Complex missions at Mound and Pinellas, and Complex nonnuclear missions at RFP. The nonnuclear electrical and mechanical manufacturing functions would be consolidated at KCP. Existing research, development, and testing (RD&T) and prototype fabrication capabilities at LANL and SNL/NM would be augmented to provide a limited fabricating capability for future neutron generator work, high power detonators, beryllium technology, pit support functions, and other nonnuclear components now located at Mound, Pinellas, and RFP. These enhanced capabilities would be used to satisfy future weapons stockpile needs, if and when identified. Tritium-handling functions now performed at Mound and Pinellas would be consolidated with tritium functions now located at the Savannah River Site (SRS) and LANL, respectively. The capabilities transferred to KCP, SRS, LANL and SNL/NM would, for the most part, be integrated into the existing plant facilities with appropriate plant modifications and renovations. The nonnuclear manufacturing workload would be downsized at all sites in response to Presidential initiatives, including START II, to reduce the nuclear weapons stockpile. The following specific actions are proposed:

- Mission Closeouts—Complex missions at Mound and Pinellas and the Complex nonnuclear missions at RFP would be terminated, and associated nonnuclear facilities turned over to the DOE Office of Environmental Restoration and Waste Management (EM) for cleanup and restoration.
- Electrical and Mechanical—The nonnuclear electrical and mechanical capabilities now at Mound, Pinellas, and RFP would be consolidated at KCP within existing facilities.
- Tritium-Handling—All tritium-handling capabilities now performed at Mound would be relocated to be with the tritium functions now performed at SRS. The neutron tube target loading for the current design of neutron generators, now performed at Pinellas, would be completed. Capability for future neutron tube target loading requirements would be provided within existing facilities at LANL.
- Detonators—The existing RD&T and prototyping capability at LANL would be enhanced to provide a limited manufacturing capability for high power detonators, now done at Mound. (The existing RD&T technology base for low-power explosives components would be maintained at SNL/NM; the existing capabilities at Mound to manufacture these components would no longer be needed.)
- Beryllium Technology and Pit Support—The existing technology base and prototyping capability at LANL would be enhanced to provide limited manufacturing capability for beryllium technology and pit support work now done at RFP.
- Neutron Generators, Cap Assemblies, and Batteries—Manufacture of the current design of neutron generators at Pinellas would be completed. The existing technology base for neutron generators would be maintained at SNL/NM. Existing RD&T and prototyping capability at SNL/NM would be augmented to provide a limited manufacturing capability for future advanced design neutron generators. Manufacturing capability for cap assemblies would be relocated from Pinellas to existing facilities at SNL/NM. The technology base now at Pinellas for the manufacture of thermal batteries would be transferred to existing facilities at SNL/NM; manufacture of the batteries would continue to be performed by the private sector. The assembly of lithium ambient batteries from commercially acquired lithium cells would be transferred to KCP.
- Special Products—The nuclear grade steels procurement and storage capability, safe secure trailer manufacturing capability, weapons trainer shop, and metrology services would be transferred from RFP to KCP. The calorimeter manufacturing capability would be relocated from Mound to existing facilities at LANL. The milliwatt heat source surveillance activities would be relocated from Mound to SNL/NM.

Purpose and Need

DOE has proposed to reconfigure the Complex to be smaller, less diverse, and less expensive to operate. The Complex must safely and reliably support whatever nuclear deterrent stockpile objectives are established in the future by the President and funded by Congress. The Nation's nuclear weapons manufacturing requirements are not as great as they were in the past, and maintaining a large manufacturing infrastructure is not a productive use of national resources.

The purpose of nonnuclear consolidation is to manage better nonnuclear manufacturing activities within the Complex, and to decrease the long-term operating costs of the Complex. In addition, consolidation of the nonnuclear manufacturing activities would provide a means to maintain the specialized skill base needed to produce and test these components, as workload requirements decrease significantly.

The nonnuclear products and services of the Complex are needed to design and manufacture nuclear weapons and test individual components. DOE needs to maintain a nonnuclear capability in order to be able to manufacture, test, and monitor nuclear weapons.

Alternatives

In addition to the proposed action, the EA analyzed three alternatives in which electrical and mechanical manufacturing activities would be consolidated at sites other than KCP. The three alternative consolidation sites for electrical and mechanical manufacturing activities were Mound, Pinellas, and RFP. For each of these alternatives, the consolidation site for electrical and mechanical activities would retain all of its other nonnuclear manufacturing activities and receive additional electrical and mechanical activities from KCP and the other two mission closeout sites. The current nonnuclear manufacturing activities at KCP and the other two mission closeout sites would be terminated and remaining nonnuclear activities at these sites would be relocated to either SRS, LANL, or SNL/NM.

The EA analyzed the option of locating beryllium technology and pit support work, now done at RFP, at the Y–12 Plant in Oak Ridge, Tennessee instead of at LANL. Under the Y–12 option, the existing capability at Y–12 would be enhanced to accomplish this work. The proposed action does not include the Y–12 option.

No Action Alternative

The EA compared the impacts of the proposed action to those expected to occur if DOE did not consolidate these functions. Under this alternative, all sites included in the proposed action would retain their current weapons missions. Planned upgrades, renovations, repairs, and maintenance activities necessary to improve Complex compliance with all environment, safety, and health and environmental restoration standards would continue irrespective of future Complex configuration. DOE expects that under No Action many current facilities would be placed in an essentially standby mode due to a major reduction in nuclear weapons manufacturing requirements, with correspondingly reduced environmental impacts.

Considerations Common to All Alternatives

All alternatives were based on the same projected workload, which is substantially lower than requirements of the recent past. Planned upgrades, renovations, repairs, and maintenance activities necessary to enable DOE compliance with all environment, safety, and health and environmental restoration standards would continue at Complex facilities irrespective of the configuration of the Complex.

The nonnuclear consolidation proposal does not include components currently purchased from the private sector. Many nonnuclear weapons components are now manufactured and supplied by private companies. Private manufacture of certain components would continue under all alternatives. Where practical and cost effective, DOE may transfer manufacture of additional products to the private sector under existing procurement procedures. However, with recent reductions in the stockpile level, component manufacturing activities may be returned to the government from the private sector because the workload does not make it cost effective for these private suppliers to continue manufacturing such small quantities.

Environmental Impacts of the Proposed Action

Based on the analysis of environmental impacts in the Nonnuclear Consolidation EA, DOE believes that the proposed action would not result in any significant environmental impacts.

Implementing the proposed action would involve changes and/or modifications to existing buildings at KCP, SRS, LANL, and SNL/NM. Relocated activities would be compatible with existing land use plans and policies. The peak construction workforce of fewer than 100 workers at each site would have negligible effects on area land use, housing, and social services. No significant impacts on ecological resources, geological resources, or soil are expected. Air quality and noise impacts from construction activities are expected to be negligible since most activities would occur within existing buildings. No new construction or activities associated with the proposed action would occur within identified base floodplains or wetlands that would require a floodplain/wetland assessment under 10 CFR 1022.12 (a). (The base floodplain is defined as the 100-year (1.0 percent chance of occurring per year) floodplain.) Currently, KCP is the only site potentially vulnerable to floods in the proposed consolidated nonnuclear complex. However, KCP would be protected from a 500-year flood event upon completion in December 1993 of a new levee. Construction of the levee is covered by an EA and FONSI prepared by the U.S. Army Corps of Engineers, Environmental Assessment: Completion of Flood Protection Works, Bannister Road Federal Complex, Kansas City, Missouri (September 1990). The Department adopted this EA (DOE/EA–0509) and issued a FONSI on September 18, 1991. No impacts are expected on archaeological or historic sites on any of the sites proposed to receive relocated nonnuclear activities. Based on comments received from the EA preapproval review process, there is no indication that the proposed action would have any adverse effects on any historic or archaeological resources at KCP, SRS, LANL, or SNL/NM.

During operation, minor increases in air emissions and noise are expected, but would not exceed applicable emissions standards and/or guidelines. Therefore, air quality and noise impacts would not be significant. Terminating the nonnuclear missions at Mound, Pinellas, and RFP would improve the local air quality near these sites, but not significantly. Increases in water usage would be less than 1 percent of current usage at KCP, SRS, and LANL, and less than 3 percent at SNL/NM. Adequate water supplies are available to accommodate the increase; therefore, no significant impacts on water resources are expected.

Socioeconomic and community service impacts at KCP, SRS, LANL, and SNL/NM are not expected to be significant. The proposed action would create approximately 1,095 jobs (425 direct and 670 indirect) at KCP at peak operations. Total in-migration would be approximately 558 persons. At SRS, approximately 103 jobs (45 direct and 58 indirect) would be created. Total in-migration would be approximately 60 persons. At LANL, approximately 294 jobs (115 direct and 179 indirect) would be created. Total in-migration would be about 154 persons. At SNL/NM, approximately 940 jobs (385 direct and 555 indirect) would be created at peak operation. Total in-migration would be about 515 persons. The change in population during the time of peak operation would be less than 1 percent at all sites and the need for additional housing units would be negligible. Therefore, socioeconomic impacts at these sites are not significant.

These in-migration estimates do not take into account such factors as rehiring preference for displaced workers that may result from the workforce restructing plan developed for the site, as required by section 3161 of the National Defense Authorization Act for Fiscal Year 1993. Accordingly, these in-migration estimates represent the maximum expected at each site.

Adverse economic consequences would occur at Mound, Pinellas, and RFP due to the termination of nonnuclear missions at these sites. At Mound, approximately 2,846 jobs (1,070 direct and 1,776 indirect) would be lost. This reduction in jobs is expected to increase the unemployment rate in the year 2000 from about 5.6 percent to about 6.1 percent. Earnings in the Mound region-of-influence (those areas in which approximately 90 percent of current DOE and contractor employees reside) would be reduced by about $93.1 million, with related decrease in the total personal income of $119.3 million. The City of Miamisburg would lose an estimated $0.8 million in income tax revenue in the year 2000 as a result of the loss of direct employment at Mound. This loss represents a 10 percent loss in total income tax revenue, a 9 percent loss in General Fund revenue, and a loss of less than 4 percent in total actual revenues. The Mound region-of-influence had 14,168 vacant housing units out of 391,809 total units at a vacancy rate of 3.6 percent in 1990. The less than 1 percent change in population after weapons mission termination would create an estimated 600 additional vacant housing units. Assuming the vacancy rate in the projected baseline year is the same as 1990, this additional 600 vacant housing units would increase the vacancy rate to less than 3.7 percent.

At Pinellas, approximately 3,038 jobs (1,050 direct and 1,988 indirect) would be lost. This reduction in jobs is expected to increase the unemployment rate in the year 2000 from 5.4 percent to 5.6 percent. Earnings in the Pinellas region-of-influence would be reduced by about $103.1 million, with a related decrease in the total personal income of $148.2 million. The Pinellas region-of-influence had 63,198 vacant housing units out of 975,046 total units at a vacancy rate of 6.5 percent in 1990. The less than 1 percent change in population after weapons mission termination would create an estimated 700 additional vacant housing units. Assuming the vacancy rate in the projected baseline year is the same as 1990, this additional 700 vacant housing units would increase the vacancy rate to less than 6.6 percent.

At RFP, approximately 1,917 jobs (750 direct and 1,167 indirect) would be lost. This reduction in jobs is expected to

increase the unemployment rate in the year 2000 from 5.6 percent to 5.7 percent. Earnings in the RFP region-of-influence would be reduced by about $68.5 million, with a related decrease in the total personal income of $82.2 million. The RFP region-of-influence had 51,030 vacant housing units out of 788,480 total units at a vacancy rate of 6.5 percent in 1990. The less than 1 percent change in population after weapons mission termination would create an estimated 400 additional vacant housing units. Assuming the vacancy rate in the projected baseline year is the same as 1990, this additional 400 vacant housing units would increase the vacancy rate to less than 6.6 percent.

The DOE has committed resources to local communities to minimize the effects described above from termination of nonnuclear missions at Mound, Pinellas, and RFP. Included in the measures and actions identified is the commitment that the DOE would develop a draft worker retraining and potential facility reuse plan by December 1993 and that the Office of Defense Programs would allocate $1.5 million to assist with developing these plans; and the Department would provide a total of $1.5 million to match $3 for each $1 provided by the Mound, Pinellas, and Rocky Flats communities for economic development planning, and up to $12 million seed money to meet the objectives of the Technology Reinvestment Project established pursuant to the Defense Authorization and Appropriations Acts for Fiscal Year 1993.

As a result of ongoing planning, DOE has revised the workforce estimates presented in the EA. Recently revised workforce figures for direct jobs are slightly different from those used in the EA analysis and, therefore, the estimates of indirect jobs would also be slightly different. Additional estimated direct jobs have been revised to 330 at KCP (a decrease of 95), 125 at LANL (an increase of 10), 390 at SNL (an increase of 5), and 50 at SRS (an increase of 5).

The proposed fiscal year 1994 budget projects a reduction in expenditures at most DOE sites estimated to result in reduced employment. The current estimate of direct jobs lost at sites with mission closeouts is 1,020 at Mound (a decrease of 50), 800 at Pinellas (a decrease of 250), and 715 at RFP (a decrease of 15). The estimated direct jobs reduction would also cause the estimated number of indirect jobs lost to be less than those used in the EA analysis. The revised workforce estimates do not affect any impact conclusions presented in the EA.

Nonnuclear manufacturing activities associated with the proposed action would increase hazardous waste volumes by less than 7 percent and would not have significant impacts on waste management at KCP, SRS, LANL, and SNL/NM. Anticipated increases in waste volumes at these sites are well within the existing treatment, storage, and disposal capabilities. Effluents and emissions due to waste management activities attributed to the proposed action would be negligible. Under the proposed action sanitary/industrial wastewater volumes are projected to increase at all sites, but not significantly. At KCP, SRS, and LANL, the increase is less than 1 percent over the current rate at these sites; at SNL/NM, the increase is less than 2 percent over the current rate. All sites have sufficient waste treatment, storage, and disposal capacity to handle the projected increases; therefore, no significant impacts are expected. At Mound, Pinellas, and RFP, nonnuclear production waste streams would be eliminated; however, this would not result in a significant impact.

No significant adverse impacts to the health of the public or workers is expected from implementation or operation activities associated with the proposed action at any of the sites. Hazard Indexes of less than 1.0 were calculated for onsite and at the site boundary at KCP, SRS, LANL, and SNL/NM. (The Hazard Index is a numerical indicator of the threshold between acceptable and unacceptable exposure levels of noncarcinogenic hazardous compounds. A Hazard Index value of 1.0 or less means that no adverse health effects are expected to occur.) The cancer risk to workers at KCP, SRS, LANL, and SNL/NM would be insignificant. The amount and types of chemicals associated with relocated activities would not add significantly to existing health conditions at these sites. Activities relocated to SNL/NM would result in lifetime cancer risks to workers of $6x10^{-6}$ per year of exposure due to the introduction of certain chemical solvents. The cancer risk to the public at SNL/NM should they be exposed to this level over their lifetimes would be less than 10^{-6}. Measures such as substituting less toxic solvents or modifying production procedures would be implemented to minimize the cancer risk to workers at SNL/NM. No significant radiological health effects are expected at LANL, SNL/NM, or SRS as a result of the proposed action. The annual dose increment associated with the increase in tritium emissions at LANL and SNL/NM would be less than 0.1 mrem and 0.022 mrem effective dose equivalent, respectively. At SRS, the annual dose increment would be less than 0.001 mrem effective dose equivalent. These doses would result in an increased risk of less than $4.5x10^{-8}$ and $9.8x10^{-9}$ potential fatal cancers from 1 year of operation at LANL and SNL/NM, respectively, and $4.5x10^{-10}$ at SRS. The annual dose increment to workers at LANL, SNL/NM, and SRS would be less than 0.011 mrem. This dose would result in an incremental and cumulative increased risk of $4.9x10^{-9}$ and $1.3x10^{-7}$ potential fatal cancers, respectively, from 1 year of operation at these sites.

The accident profiles at each site would not change as a result of the proposed action. The probability or consequences of potential accidents would not increase appreciably at any of the sites since relocated functions involve activities and chemicals that are currently being performed at consolidation sites.

The proposed action would have no cumulative effects on the Complex, because the action represents a consolidation of existing activities and functions, rather than an initiation of new activities. In most instances, consolidation would reduce potential cumulative environmental impacts at all sites. Nonnuclear activities now located within aging facilities at donor sites would be transferred to sites with newly refurbished facilities. These facilities would be designed and constructed to incorporate DOE environment, safety, and health requirements on Complex reconfiguration and meet all applicable codes and standards. The facilities to which the nonnuclear activities would be transferred already contain virtually all of these operations, materials, and/or hazardous waste streams. Consolidation would also reduce the number of sites with activities generating these hazardous materials within the Complex.

Environmental Impacts of Alternatives

Environmental consequences discussed above at SRS, LANL, and SNL/NM under the proposed action would be the same or less under the Mound, Pinellas, and RFP alternatives and not significant. At the consolidation sites for each alternative (Mound, Pinellas, and RFP), substantial new construction would be required. If these alternatives were selected, additional site-specific NEPA documentation would be required.

Determination

Based on the information and analysis in the EA, the comments received on the

proposed FONSI, and the DOE response to those comments, the DOE has determined that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS is not required and incorporation of the analysis of the proposed nonnuclear consolidation into the Reconfiguration PEIS is not necessary.

Issued in Washington, D.C. this 8th day of September, 1993.

Peter N. Brush,

Acting Assistant Secretary Environment, Safety and Health.

ATTACHMENT

Summary of Comments Received on the Proposed FONSI

A total of 29 documents containing comments were submitted on the proposed FONSI and supporting EA during the 30-day public review period. Although the comments raised questions concerning the proposed action, no significant new information having a bearing on environmental concerns was presented which affects the DOE's proposed NEPA determination. Those comments requiring a response are summarized below along with the DOE's response.

Comment: DOE should reconsider the alternative of consolidating electrical and mechanical functions at two sites and the alternative to consolidate all tritium work at Mound.

Response: The two-site proposal was analyzed and documented in DOE's Two-Site Nonnuclear Consolidation Study (August 1992) and its addendum (December 1992) that updated the Study to account for the START II arms reductions. The two-site alternatives, while less expensive in initial capital cost, are much more expensive from a long-term life-cycle cost perspective. The cost study prepared for the Mound tritium consolidation proposal concluded that the life-cycle costs of consolidating such work at Mound would be nearly $2 billion greater than the life-cycle consolidation costs at SRS. The two-site alternatives and the Mound tritium consolidation alternative were considered unreasonable due to life-cycle costs and eliminated from further analysis as described in EA section 3.1.4.

Comment: Existing land use plans and policies are outdated and inappropriate at LANL and SNL; also emission standards are not currently being met at these sites.

Response: Site Development Plans for LANL and SNL were updated in 1990 and 1989, respectively. These plans are reviewed and revised as appropriate, to meet mission requirements at these sites. As described in sections 4.1.3.2 and 4.1.5.2 of the EA, baseline air quality is well within applicable guidelines and standards except for the ozone (1-hour) standard at LANL and SNL, and the Total Suspended Particulate (TSP) standard at LANL. The ozone exceedence is typical of urban areas and areas affected by vehicle exhaust. The TSP exceedence is typical of semiarid and arid regions with large areas of exposed earth. Neither exceedence is the result of activities at either of the sites.

Comment: Monitoring of air quality on the Santa Clara Reservation (northwest of Los Alamos) identified elevated radiation background levels. No mention is made in the FONSI to assess this potential adverse impact.

Response: Impacts to the public and the environment, worker exposures, and accidents due to chemicals and tritium emissions from the proposed action at LANL are described in EA section 4.1.3.9. Activities associated with the proposed action at LANL would not add to radiation background levels on the Santa Clara Reservation. The tritium inventory requirements for the neutron tube target loading activities are about 2 grams (EA section 4.1.3.9, pg 4–91). As indicated in the FONSI, no significant adverse impact to the health of the public from tritium is expected.

Comment: Over time, water usage increases of 4 percent and 1 percent at SNL and LANL, respectively, may prove significant; DOE has failed to meet clean water standards at LANL or SNL.

Response: As described in EA section 4.1.5.3, water samples are obtained from monitoring stations upstream and downstream of SNL in the Rio Grande and from Coyote Springs as part of the annual surface water monitoring program. Results from the 1990 annual monitoring for radionuclides are presented in EA table 4.1.5.3–1 and show that concentrations of radionuclides in surface waters do not exceed applicable standards. As described in EA sections 4.1.3.3 and 4.1.5.3, the proposed action would increase water use by 1,840 gallons per day (<1 percent) and 25,000 gallons per day (<3 percent) over current water use at LANL and SNL, respectively. Based on current water use and available water supplies, the additional amounts are not significant. The Affected Environment parts of these same sections also discuss the instances where discharges at LANL and SNL were noncompliant (mostly for pH) with NPDES permit limits and the City of Albuquerque's Sewer Use and Wastewater Control Ordinance. As indicated in the EA, all noncompliances were reported and corrective actions implemented.

Comment: Some buildings at LANL and SNL that are within the 30-year-old or older category may have historic qualities associated with them that would qualify them for listing on the National Register of Historic Places. This is particularly true for buildings associated with the Manhattan Project at LANL and buildings associated with the assembly of the first atomic and hydrogen bombs at SNL.

Response: Facilities that will be affected by nonnuclear consolidation at LANL and SNL are identified and described in EA sections 3.3.3 and 3.3.5, respectively. None of them were considered associated with either the Manhattan Project or the assembly of the first atomic and hydrogen bombs at LANL (EA sections 4.1.3.6 and 4.1.5.6). A final determination will be requested from the State Historic Preservation Office prior to project implementation.

Comment: The DOE should not close the Rocky Flats Plant; jobs would be lost in Boulder and Denver.

Response: Suburban expansion, changing world conditions, and the cost savings to be realized through consolidation, contributed to the decision to terminate the nonnuclear mission at RFP. It is estimated that the jobs lost at Rocky Flats would increase the unemployment rate in the local Region of Influence (which includes the cities of Boulder and Denver) from 5.6 percent to 5.7 percent.

Comment: Seventy-seven percent of current Mound employees live in a geographic area whose population is only 37 percent of the population in the DOE defined Region of Influence; where half of the current Mound employees reside the unemployment rate would rise from 4.5 percent to 8.0 percent.

Response: In order to assess the effects of in-migration and out-migration patterns, DOE assessed local Regions of Influence where 90 percent of the site employees reside. This standard was used for all sites in the EA to assure that the analyses would be consistent and comparable. Site employment data and residence data were obtained from all sites. In the case of Mound Plant, the number of employees and their residences was provided by Mound Plant Personnel Staff (EA appendix E, table E3.6–1a). An analysis of the in-migration and out-migration estimates was presented in the EA for all cities and counties contained in each Region of Influence. The estimate that unemployment would rise from 4.5 percent to 8.0 percent assumes that half the indirect jobs lost would come from

the small residential communities where half the current Mound Employees reside. However, the economic interactions of industries in the region indicate that the majority of the indirect job loss would come from more urbanized areas in the Region of Influence.

Comment: The statement "This reduction in jobs would not increase the unemployment rate in the year 2000 beyond the projected baseline level of 5.6 percent (pp 4–150, 4–151)" misstates the conclusion of DOE's own Socioeconomic Model. Model results indicate a rise in the unemployment rate from 5.6 percent to 6.1 percent.

Response: The comment is correct. This statement in the EA was based upon an earlier analysis and is incorrect. The most recent and final conclusion from the model results are that unemployment in the Mound Region of Influence would increase from 5.6 percent to 6.1 percent; in the Pinellas Region of Influence from 5.4 to 5.6 percent; and in the RFP Region of Influence from 5.6 to 5.7 percent. The FONSI has been changed to reflect the new model results.

Comment: The EA does not adequately address the socioeconomic impacts on the City of Miamisburg and other local communities.

Response: The EA addresses any community with concentrations of Mound employees. The assessment showed that only three communities would have an out-migration of greater that 1 percent of population. No community would have an out-migration of more than 2 percent. These out-migrations would have minor effects on schools and tax revenue, however, because the out-migration estimated for the local communities over the four-year period of nonnuclear consolidation is less than the annual rate of change experienced by the communities from 1980 to 1990.

Comment: The EA assumes that 50 percent of critical people/skills will move to receiver sites. This assumption is contrary to DOE experience in Burlington, Iowa, where consolidation of assembly options with Pantex (1970) resulted in 4 percent of the workforce transferred.

Response: The DOE believes the assumption of 50 percent of critical skilled employees (employees with specific technical skills that, if lacking, would cause delays, or employees in jobs critical to the continued operation) moving to receiver sites to be valid. If these critical people/skills prefer to stay in the local region, it can only be assumed that they would choose to do so because alternative employment opportunities were available. In that case, the estimates presented in section 4.1.6.7 of the EA for indirect job losses, population out-migration, and housing vacancies would be lower. If fewer critical people/skills relocate, then the effects will be lower than estimated in the EA.

Comment: Miamisburg will lose 16 percent of the City's General Revenue and 21 percent of the Capital Improvement Budget as a direct result of the Mound Plant losing Defense Programs missions.

Response: The DOE is reacting to changing world events by downsizing and consolidating. A consequence of this would be to reduce the number of workers needed at Mound for the DOE to perform its mission in the future. However, new jobs would also be created by follow-on efforts to decontaminate and transition to other uses those facilities that are no longer needed to support the national security mission. The General Revenue in Miamisburg is supported by revenues primarily generated from an income tax imposed on anyone working in Miamisburg regardless of residence. As described in EA section 4.1.6.7, the estimated loss in Miamisburg General Fund revenue due to the proposed action from direct jobs is projected to be 9 percent. This does not assume any new jobs being added for decontamination and transition activities that would lessen budget impacts for Miamisburg.

Comment: The loss of approximately 3038 jobs, 1050 direct and 1988 indirect, and the resulting loss of more than $250 million in personal income in the Largo, FL area would have significant detrimental effects.

Response: The estimated loss of $250 million in personal income in the year 2000 is less than 0.05 percent of the estimated $51.5 billion in personal income in the Region of Influence. This estimate does not include the resources DOE has committed to mitigate the effects which terminating the nonnuclear mission at Pinellas would have on the Largo, FL area. However, socioeconomic impacts alone, without significant impact to the physical environment, cannot render the overall impacts of a proposal "significant" within the meaning of the National Environmental Policy Act.

Comment: The impacts of cleaning up LANL solid waste management units have not been addressed; the annual increase in waste amounts resulting from the proposed action are only guesses; future demands for increased weapons production could change those figures by orders of magnitude; any new waste generation while a facility is in non-compliance would be prohibited.

Response: The Los Alamos Waste Management Program treats, stores, and disposes of existing wastes generated at LANL, and would do so for process wastes generated by nonnuclear consolidation. The Los Alamos Environmental Restoration Program identifies and cleans up sites where hazardous and radioactive wastes were disposed of in the past, and is independent of the nonnuclear consolidation proposed action. Approximately 2,250 potential release sites aggregated into 24 operable units, are currently scheduled for investigation in the LANL Environmental Restoration Program under the RCRA Hazardous and Solid Waste Amendments permit. Nonnuclear consolidation would not affect or be affected by the Environmental Restoration Program's projected cost for cleanup or estimated time for assessment.

The annual waste amounts presented in the EA are process engineering estimates based on many years of manufacturing experience. Projected demands for future production have already been accounted for in these estimates. There are no foreseeable production workloads that can change these figures by orders of magnitude.

Wastes generated at LANL and SNL are managed in accordance with an extensive network of DOE Orders as well as Federal, State, and local laws and regulations established to protect the health and safety of workers, the public and the environment. A Federal Facility Compliance Agreement and Administrative Order dictates the Corrective Activities Programs to bring LANL and SNL into regulatory compliance within a short time frame by specifically addressing waste issues. The Federal Facility Compliance Act of 1992 requires DOE to provide specific information to EPA and the State of New Mexico on LANL's and SNL's mixed waste streams, treatment facilities, and technology development activities. LANL and SNL have devoted significant resources to revise and improve waste handling and characterization procedures for safe handling of waste and to meet established waste acceptance criteria for safe treatment and/or disposal of wastes.

Both LANL and SNL have implemented and are developing waste minimization programs to minimize generation of these wastes. DOE is currently addressing DOE-wide waste disposal issues in the Programmatic EIS for the Integrated Environmental Restoration and Waste Management Program. That document, for which a

notice of intent was published on October 22, 1990 (55 FR 42633), will analyze alternative means of managing DOE's hazardous, radioactive, mixed, and other waste; transportation issues regarding waste treatment or disposal; and environmental restoration of DOE sites.

Comment: Reconfiguration of nonnuclear and nuclear activities at Los Alamos sustains and increases the risk of accidents and exposure to Santa Clara Pueblo; the system used to determine acceptable exposures to toxic substances is unacceptable.

Response: Reconfiguration of nuclear activities is not covered in this EA. Those issues as they pertain to LANL will be covered in the Reconfiguration PEIS scheduled for release to the public for comment in 1994. The relocation and subsequent operation of nonnuclear activities at LANL would be done in strict accordance with all applicable ES&H requirements and as such would not present any significant risks or exposures to Santa Clara Pueblo. Section 4.1.3.9 of the EA describes the human health baseline and impacts from the proposed action at LANL.

All of the risk calculations presented in the EA were based on incremental changes to the existing site-related hazards from the introduction of new operations. Appendix F of the EA describes the methodology used to access potential public and worker risks for hazardous chemicals and radioactive materials during an accident and normal operations.

The health risk methodology used in the EA received internal technical peer review as well as outside review during the State/Indian Tribe pre-approval review process. The technical review determined that the methodology used usually will overestimate the risk by assuming between 50 and 100 percent uptake of the chemical of concern in the calculations. No comments or concerns were raised by state agencies on the health risk methodology during the pre-approval review process.

Comment: Hazardous/toxic material is being transported across reservation lands of Santa Clara Pueblo and San Ildefonso Pueblo. Neither Pueblo has received financial or technical assistance to hire and train emergency staff, procure equipment and develop/implement emergency preparedness plans.

Response: This concern was addressed previously in EA Appendix G, comment summary 10.1 of the EA. For neutron tube target loading, only very small quantities of tritium would be transported to or from LANL by air. The risk of transporting this tritium is very small, as explained in section 4.5 of the EA. All shipments to and from LANL would be in compliance with Federal transportation regulations (title 49, Code of Federal Regulations). By themselves, the functions proposed for transfer to LANL do not justify the Government's providing special technical assistance to the Indian Pueblo Tribes for emergency preparedness. In any case, the Department of Transportation is responsible, under the Hazardous Materials Transportation Act, as amended by the Hazardous Materials Transportation Uniform Safety Act, for coordinating Federal training programs and for providing technical assistance to States, tribes and local governments for emergency response training and planning.

Comment: The DOE must take a whole system/whole planet look at this proposal; only decreased weapons production should be permitted at LANL and SNL; DOE should stop using all heavy metals and nuclear materials which are harmful to life, and study bacteria, plants, and amoebas which can feed on and neutralize plutonium, tritium, etc., so that we can deal responsibly with the byproducts we produce.

Response: The cumulative effects of the nonnuclear consolidation proposal are described in EA section 4.3.6. Implementing the proposed action would reduce potential environmental impacts from those that would occur with the No Action alternative. Consolidation would also reduce the number of sites with hazardous activities and/or materials within the Complex. The existing air quality and groundwater quality at LANL and estimated additional air and water emissions due to the activities that are part of the proposed action are discussed in EA section 4.1.3.2 and 4.1.3.3. The proposed action would have a negligible effect on cumulative air quality. Cumulative impacts are not expected on groundwater resources at LANL and SNL (See EA section 4.3). The proposed action would not interfere with ongoing and planned environmental remediation activities that address known air quality concerns and groundwater contamination at these sites.

The Los Alamos National Laboratory is presently engaged in conducting research related to environmental cleanup technologies. However, the DOE is required by the Atomic Energy Act to ensure that the United States maintains a credible nuclear deterrent. To assure this deterrent capability, the DOE must use certain materials in weapons-related work. To minimize environmental impacts associated with, and hazardous and toxic materials which may be used in, this endeavor, the DOE has implemented waste minimization and pollution prevention programs at all facilities. Discussion of these programs is presented in chapter 4 of the EA under Waste Management/Pollution Prevention.

Comment: No new expansion or production involving hazardous materials should be undertaken without first doing a site-wide EIS at LANL and SNL; site-wide EISs for LANL/SNL need to be updated and separate EISs should be prepared for these new and changed production capacities.

Response: DOE's NEPA regulations provide for the preparation and periodic reevaluation of site-wide EISs for certain large, multiple-facility DOE sites (10 CFR 1021.330). Implementation of this provision is independent of those decisions necessary to carry out the activities planned at LANL and SNL under the proposed action. This FONSI is based on the analysis presented in the EA. Chapter 3 of the EA describes the processes and activities to be received at each site due to the proposed action. The affected environment and environmental consequences due to the proposed action at each site are described in chapter 4 of the EA. This analysis shows that the activities involving hazardous materials would not result in significant impacts.

Comment: The DOE should not be consolidating its nonnuclear manufacturing activities at one site as it makes the weapons complex more vulnerable to natural and manmade disasters, such as flooding at Kansas City and the terrorist bombing of the World Trade Center.

Response: The Kansas City Plant was not affected by recent floods, and the ongoing Corps of Engineers flood control project described in EA section 4.1.1.3 will only improve the Plant's flood protection. The risks to our national security as well as the mission of DOE to manufacture nuclear weapons and maintain the Nation's weapons stockpile are considered in all policy decisions regarding the Nuclear Weapons Complex. Possible threats due to weather, terrorism, war, and accidents are included in the evaluations. In all cases, measures are taken to ensure that all possible risks are minimized and that safeguards are in place to mitigate any unforeseen disruptions to national security or the role of DOE in maintaining the Nation's nuclear deterrent. Protection against terrorism is an ongoing activity at all DOE sites.

Comment: DOE's weapons mission now must be the elimination of nuclear weapons, and, as a corollary, stopping nuclear weapons proliferation and associated pollution worldwide. All steps to continue nuclear weapons production will contradict and derail this mission and expend Federal funds much needed for public programs. Decisions to continue or increase nuclear weapons production anywhere have the direct consequence of acting to increase these activities everywhere.

Response: The mission of DOE and its role in maintaining the nuclear weapons stockpile is discussed in the EA in section 1.1. The size of the nuclear weapons stockpile is determined on a year-to-year basis through a joint recommendation by the Secretaries of Defense and Energy approved by the President. Although recent world events have made the need to maintain a large nuclear weapons stockpile no longer a requirement for national defense, the basic defense mission of DOE under the Atomic Energy Act, as reflected in annual authorization and appropriations legislation, has not changed.

In order to carry out this mission safely and effectively, DOE must retain the capability to maintain the weapons stockpile. The purpose of this nonnuclear consolidation is to carry out this national security requirement at the lowest possible cost. By consolidating and downsizing the Complex, DOE would eventually reduce the cost of weapons operations, making more resources available for other Federal activities. This proposal has been analyzed and its cost-effectiveness confirmed in the DOE Nonnuclear Consolidation Cost Effectiveness Report which was delivered to Congress in January 1993. In addition, this proposed consolidation would reduce the overall environmental impacts of maintaining the nuclear deterrent.

No increase in nuclear weapons production is planned. Rather, this consolidation reflects a decrease in the size of the stockpile to the lower levels that are now deemed adequate for national security.

Comment: Nonnuclear consolidation is an extension of, not separate from nuclear reconfiguration and should be included as part of the Reconfiguration PEIS since the processes described in the EA contain or are associated with radioactive materials.

Response: As stated in the EA (section 2.4), the term "nuclear" is limited to those weapons components fabricated from or containing various isotopes of plutonium and uranium defined as Special Nuclear Materials. All other weapons components (some of which contain small amounts of tritium) and processes are called nonnuclear. The DOE determined that the nonnuclear consolidation proposal could be separated from the Reconfiguration PEIS because the nonnuclear consolidation would not affect or predetermine the outcome of the PEIS (57 FR 3046). Additionally, by separating the nonnuclear element of the Complex the Nation would realize the annual savings resulting from effectively closing down three separate nonnuclear weapons component fabrication sites early. The technical capability that otherwise would be lost through inactivity at these sites would also be retained. All of the processes involved in the nonnuclear consolidation proposal have been described and the environmental impacts of the action evaluated in accordance with NEPA.

Comment: The DOE did not give the public adequate time to comment on the FONSI.

Response: The DOE distributed approximately 3,000 copies of the proposed FONSI, 2,000 copies of the EA Executive Summary, and 1,200 copies of the complete EA to Federal agencies, state and local governments, American Indian groups, and interested members of the public on July 2, 1993. Copies were also sent to the 15 designated DOE reading rooms across the Nation. Additionally, the **Federal Register** notice of the proposed FONSI published July 8, 1993, indicated that copies of the EA or EA Executive Summary were available to the public upon request. The proposed FONSI and supporting documents were available for public review for 30 days in accordance with 40 CFR 1501.4(a)(2)(i) and 10 CFR 1021.322(d). All comments postmarked before the closing date have been considered. In addition, DOE considered late comments to the extent practicable.

Comment: Waste treatment, storage, and disposal practices are problematic, unsafe, and often illegal throughout DOE facilities. In view of their past and present practices, it is exceedingly inappropriate to remove the public's oversight capabilities of this major Federal action at this time.

Response: DOE acknowledges that not all of its facilities are currently in full compliance with applicable Federal and state regulations. DOE has entered into numerous agreements with individual states and the EPA to address environmental compliance issues which have arisen, due in many cases to the age of the DOE facilities or the uniqueness of DOE operations (EA table 5–4). Most of these compliance agreements include a commitment from the DOE to achieve compliance by a specified date and include schedules and milestones for achieving compliance. Through these agreements, Federal agencies and state governments maintain involvement and oversight on behalf of the public.

Comment: DOE should not forget to consider solar power, wind, and other natural energies. By changing its priorities, DOE could become the most respected government department.

Response: The DOE coordinates and administers the energy functions of the Federal government. In that capacity, specific organizations within the Department have missions related to long-term, high risk research and development of energy technologies such as solar power, wind and other natural energy sources; the marketing of Federal power; energy conservation; energy regulatory programs; and a central energy data collection and analysis program. However, the Department is also responsible by law to maintain the nuclear weapons program. The priority given to the nuclear weapons program is dictated by national security concerns.

Comment: DOE has been implementing the proposed action for several years by not funding or implementing upgrade projects at Mound; the Replacement Tritium Facility (RTF) at SRS is not capable of accepting tritium functions from Mound without environmental impacts; SRS has a history of serious tritium releases to the environment which indicates the impacts at SRS have been underestimated.

Response: Not funding some of the proposed upgrade projects at Mound over the past several years was based on normal budgetary and programmatic considerations applied to all DOE programs. The fact that certain upgrade projects have not been completed was not a factor in the decision to consolidate at sites other than Mound. The proposal to consolidate at the Kansas City Plant was based on the detailed analysis performed in the Nonnuclear Consolidation Plan, which is described in Section 1.8 of the EA and was confirmed by three independent consultants appointed by the Secretary.

The Replacement Tritium Facility (RTF) at the Savannah River Site (SRS) is a new state-of-the-art tritium handling facility designed to comply with all current operating requirements. A separate Environmental Assessment (DOE/EA–0297, classified, March 1986) was prepared for this facility and a Finding of No Significant Impact was issued on April 15, 1986 (51 FR 12727). Prior to full operation and consolidation

of the Mound tritium handling functions in the RTF, a standard DOE Operations Readiness Review (ORR) to ensure proper operation and compliance with all applicable regulations is being performed. If, at the completion of this review, the facility does not meet standards then full operation and consolidation would not proceed until any deficiencies are corrected.

The impacts of possible tritium releases resulting from nonnuclear consolidation at SRS have been fully and conservatively analyzed in Section 4.1.2 of the EA. No significant impact on the environment, workers, and the general public due to normal operations or accidents were identified. Past tritium releases at SRS have mainly been associated with nuclear reactor operations. Since the reactors at SRS are no longer operational and there are no plans to restart them, the major source of these releases has been eliminated.

[FR Doc. 93–22451 Filed 9–13–93; 8:45 am]

BILLING CODE 6450–01–P

Hot Dry Rock Geothermal Energy Systems; Development of a Facility To Produce and Market Electric Power or Thermal Energy

AGENCY: Albuquerque Operations Office (DOE/AL), Department of Energy.

ACTION: Notice of program interest.

SUMMARY: DOE/AL is soliciting comments and expressions of interest in developing a cost-shared, industry-led project to develop a prototype facility to produce and market electric power or heat generated from geothermal energy in hot dry rock.

DATES: Statement of interest should be received at DOE/AL on or before October 29, 1993.

FOR FURTHER INFORMATION CONTACT: Ms. Gladys J. Hooper, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–1146. Mr. Nyles Lackey, U.S. Department of Energy, Albuquerque Operations Office, P.O. Box 5400, Albuquerque, New Mexico 87185–5400, (505) 845–4527. Dr. David Duchane, Los Alamos National Laboratory, EES–DO, MS D443, Los Alamos, New Mexico 87545, (505) 667–4318.

SUPPLEMENTARY INFORMATION:

Background

Geothermal energy is found at depth everywhere in the world in the form of heat stored in rock which is hot but essentially dry. Advanced technology to extract the geothermal energy from this hot dry rock has been under development for over 20 years. The technology entails using wells to circulate water through a man-made geothermal reservoir to extract energy and bring it to the surface for recovery and use. Several studies have estimated that geothermal energy from hot dry rock could be used to produce electricity at costs of $0.05–0.07 per kWh at numerous high gradient locations located in the western U.S. and elsewhere around the world. Recent testing at a pilot facility at Fenton Hill, New Mexico, produced the following results; (1) Steady, uniform heat production at a level of four thermal megawatts was achieved from a single production well over a period of more than six months (with continuous operation of nearly four months); (2) Access to fractured hot rock increased with time as fluid was circulated through the reservoir; (3) Water consumption decreased to seven percent of the injected fluid over the course of the testing; (4) Thermal energy in the amount of more than six times the thermal equivalent of the fuel and electricity used to run the plant was continuously produced; (5) Geothermal energy was extracted with essentially no emissions (except waste heat) to the environment during normal operations; and (6) Dissolved solids remained at levels of less than 4,000 parts per million (ppm) and did not present scaling problems in piping and equipment. Based on this recent experience and other experiences obtained over the years in the United States and overseas, there appear to be no technical impediments to the commercialization of hot dry rock technology.

Purpose

The purpose of this notice is to obtain a preliminary indication of interest by utilities and industrial concerns in cost-sharing to develop and operate a demonstration facility to generate and market electric power or heat from hot dry rock geothermal energy. Comments are solicited from independent power producers, utilities, energy companies, well field drilling and service organizations, turbine manufacturers, and other businesses with an interest in the development of geothermal energy resources. This notice is only intended to: Decide whether to proceed with a solicitation; refine the specifications of the solicitation, identify potential bidders, promote the formation of partnerships or consortia; and stimulate interactions among potential participants. At some future date, if a solicitation for this project is issued, the offeror will be invited to specify a site for the development of the facility, the size and scope of the plant, and the customer(s) to whom the electric power or thermal energy will be sold, as well as to provide a plan for the construction of the facility. DOE expects that appropriate facilities for consideration under this project will be on the order of 1–25 megawatts in electricity generating capacity or 10–150 thermal megawatts of heat production potential. DOE will not operate or assume an ownership position in the facility. The plant and its revenue will be the property of the successful offeror(s). A minimum direct cost-sharing by the offerer for this facility on the order of 30 percent is expected with a target of 50 percent. A portion of the cost-sharing, generally that in excess of 30 percent, may include in-kind cost participation. The federal government's share of any project will be limited to about $30 million over a period covering the construction of the facility and up to two years of operations. DOE will exercise appropriate oversight authority, but the day-to-day management of the project will be exercised by the offerer. In connection with this project, DOE is prepared to make available the equipment, materials, and other resources of the hot dry rock pilot facility located at Fenton Hill, New Mexico. This facility may be used for cost-shared additional testing in order to provide any specialized information that may be needed to further commercialization of hot dry rock technology. Alternatively, the facility can be made available for the commercial applications contemplated by this notice.

Expressions of Interest

DOE, through its AL office, requests comments and expressions of interest in order to determine the level of interest by private parties in the proposed project to build and operate a geothermal power facility using hot dry rock technology. Moreover, the requested information will help the DOE to decide whether to issue a solicitation, refine the specifications of the solicitation, and identify potential bidders. Comments, suggested modifications, additions, deletions or alternative approaches are encouraged and welcomed. Proprietary details of responses should be identified and will be kept in confidence. Failure to respond to this notice will not disqualify any party from responding to any subsequent solicitation, but a response will assure that the party receives the solicitation and notification of related activities. Expressions of interest should not include detailed plans or proposals but should include

the following: (1) The name, address, telephone number, and facsimile number of the primary contact person; (2) the potential participants, their affiliations, their proposed roles, and brief documentation of their interest in the project; (3) interest, if any, in possible membership in a consortium which may be put together to carry out the program(s) defined herein; (4) comments on the proposed approach, the scope of the proposed project as outlined in this notice, cost sharing, funding level, project location criteria, and other information deemed pertinent to the final definition of the project; and (5) a statement indicating whether or not the respondent wishes to receive a copy of the solicitation. Responses to this notice should not exceed five pages in length exclusive of appendices. Responses shall be sent to the attention of Mr. Nyles Lackey at the address listed above.

Technology Prospects

Copies of pertinent reports on hot dry rock are available to aid parties in deciding their level of interest. Copies of these reports are available from Los Alamos National Laboratory.

Contact Dr. David Duchane, at the address listed above, for information on how to obtain copies of these reports.

Issued in Albuquerque, New Mexico on August 25, 1993.

Richard A. Marquez,

Assistant Manager for Management and Administration.

[FR Doc. 93–22453 Filed 9–13–93; 8:45 am]

BILLING CODE 6450–01–M

Environmental Technology Community College; Educational Bridge Program

AGENCY: Albuquerque Operations Office (DOE/AL), Department of Energy.

ACTION: Notice of program intent.

SUMMARY: DOE, Technology Development, Office of Environmental Restoration and Waste Management, pursuant to the DOE Financial Assistance Rules, 10 CFR part 600, and Public Law 101–510, announces that an Environmental Technology Community College Educational Bridge Program will be established in the near future. DOE is soliciting expressions of interest in the development or enhancement of an educational program whose purpose is to link high school students, interested in Environmental Technology curriculums, to four year institutions via community colleges. The purpose of this program is to help meet the manpower needs of DOE in its cleanup mission. In light of this mission, the program objectives are:

(1) To enhance the quality and quantity of Environmental Restoration and Waste Management (EM) technician curricula, which will provide skilled environmental professionals,

(2) To promote and increase technology transfer opportunities for students; and

(3) To increase the participation of minority and educationally disadvantaged students in post-secondary education.

DATES: Statement of Interest should be received at DOE/AL on or before October 14, 1993.

FOR FURTHER INFORMATION CONTACT: Statement of Interest should be sent to the attention of Mr. Roger Cartee, Department of Energy, Albuquerque Operations Office, Technology Transfer and Commercialization Staff, P.O. Box 5400, Albuquerque, New Mexico 87185–5400, telephone (505) 845–5251.

SUPPLEMENTARY INFORMATION: The Office of the Technology Development is planning to support a Community College Educational Bridge Program that will ultimately increase the future work force of professionals and technologists who can help to meet DOE's environmental challenges of site restoration and cleanup. The Community College Bridge Program will provide a curriculum that focuses on environmental restoration and waste management. Additionally, emphasis is placed on increasing the participation of women, minorities, disabled, and disadvantaged students in the required work force.

For the purpose of this Community College Bridge Program, a community college shall be defined by the state in which the school resides, offer two-year degrees, and be capable of delivering environmental education programs to the local population. It is also anticipated that the DOE will be interested in community colleges that can provide the following requirements:

1. Create a plan to show the interface and interaction procedures with high schools and four year educational entities.

2. A statement of proposed means of delivering environmental education to community college students, as well as a description of the environmentally based curriculum, the community college's facility (including classrooms and laboratories), and faculty.

3. Describe strategies for developing linkages with other entities for additional funding/leveraging purposes.

4. Provide a detailed discussion of the milestones and funding required to accomplish the goals and objectives of the Community College Bridge Program.

5. Include a procedure to evaluate and review student progress to determine if program goals and objectives are being met.

Funding: The estimated total program funding available from DOE is approximately $800,000 for fiscal year (FY) 94. It is possible that up to four awards of $200,000 will be made.

Issued in Albuquerque, New Mexico, on September 3, 1993.

Richard A. Marquez,

Assistant Manager for Management and Administration.

[FR Doc. 93–22454 Filed 9–13–93; 8:45 am]

BILLING CODE 6450–01–M

Oak Ridge Field Office; Acceptance of an Unsolicited Application for Financial Assistance

AGENCY: Department of Energy (DOE).

ACTION: Notice.

SUMMARY: DOE announces that pursuant to 10 CFR 600.14(f) it intends to accept an unsolicited application from Institute for Paper Science and Technology (IPST) and award a cooperative agreement in the amount of $120,000 for commercialization of on-line ultrasonic sensors for measuring paper mechanical properties. Successful implementation of this instrumentation will permit more effective utilization of raw materials and energy while producing products with improved uniformity and performance. Energy savings result from optimization of the utilization of energy intensive processes, such as refining, and from efficiency improvement in subsequent converting processes as a result of uniform product. Energy waste is avoided by minimizing substandard production. The proposed work is to develop a commercially viable system for on-machine, out-of-plane and in-plane measurements of ultrasound velocities; install a working system on a paper machine in a host paper mill; demonstrate the system's capabilities and benefits to the paper manufacturing industry; and have a vendor committed to providing and supporting the system. Eligibility for this award is, therefore, restricted to IPST pursuant to 10 CFR 600.14(j).

FOR FURTHER INFORMATION CONTACT: Stanley Sobczynski, Conservation and Renewable Energy, U.S. Department of Energy, Washington, DC 20585, 202–586–1878.

Issued in Oak Ridge, Tennessee on September 7, 1993.

Peter D. Dayton,

Director, Procurement and Contracts Division, Oak Ridge Field Office.

[FR Doc. 93–22452 Filed 9–13–93; 8:45 am]

BILLING CODE 6450–01–M

Energy Information Administration

Agency Information Collections Under Review by the Office of Management and Budget

AGENCY: Energy Information Administration, DOE.

ACTION: Notice of request submitted for expedited review by the Office of Management and Budget.

SUMMARY: The Energy Information Administration (EIA) has submitted the energy information collection(s) listed at the end of this notice to the Office of Management and Budget (OMB) for review under provisions of the Paperwork Reduction Act (Pub. L. 96–511, 44 U.S.C. 3501 *et seq.*). The listing does not include collections of information contained in new or revised regulations which are to be submitted under section 3504(h) of the Paperwork Reduction Act, nor management and procurement assistance requirements collected by the Department of Energy (DOE)

Each entry contains the following information: (1) The sponsor of the collection; (2) Collection number(s); (3) Current OMB docket number (if applicable); (4) Collection title; (5) Type of request, e.g., new, revision, extension, or reinstatement; (6) Frequency of collection; (7) Response obligation, i.e., mandatory, voluntary, or required to obtain or retain benefit; (8) Affected public; (9) An estimate of the number of respondents per report per period; (10) An estimate of the number of responses per respondent annually; (11) An estimate of the average hours per response; (12) The estimated total annual respondent burden; and (13) A brief abstract describing the proposed collection and the respondents.

DATES: DOE has requested expedited OMB approval by September 17, 1993. The Desk Officer may be telephoned at (202) 395–3084. (Also, please notify the EIA contact listed below.)

ADDRESSES: Address comments to the Department of Energy Desk Officer, Office of Information and Regulatory Affairs, Office of Management and Budget, 726 Jackson Place NW., Washington, DC 20503. (Comments should also be addressed to the Office of Statistical Standards at the address below.)

FOR FURTHER INFORMATION AND COPIES OF RELEVANT MATERIALS CONTACT: Jay Casselberry, Office of Statistical Standards, (EI–73), Forrestal Building, U.S. Department of Energy, Washington, DC 20585. Mr. Casselberry may be telephoned at (202) 254–5348.

SUPPLEMENTARY INFORMATION: The energy information collection submitted to OMB for review was:

1. Energy Information Administration, Office of Energy Markets and End Use.
2. EIA–457A/H.
3. 905–0092.
4. Residential Energy Consumption Survey.
5. Revision.
6. Triennially.
7. Mandatory.
8. Individuals or households, state or local governments, businesses or other for-profit, Federal agencies or employees, and small businesses or organizations.
9. 9,430 respondents.
10. .333 responses.
11. 2.08 hours per response.
12. 6,557 hours.
13. EIA–457A/H collection comprehensive national and regional data on the consumption of energy in the residential sector. Data are used for analysis and forecasting. The revisions proposed are: (1) The addition of questions to be asked at single-family, owner-occupied homes built in 1988 or later (a copy of the additional questions is included in this notice); and (2) the deletion of some questions previously approved that are now considered unnecessary. The deleted questions are: A–7 (energy rating), A–10A (modular housing), A–11 (built as apartment), C–9 (zoned heating), D–11 (preference for new air conditioner over old one), D–15 (size of window air conditioners), E–6 (preference for new water heater over old one), E–9 (are baths taken more often than showers), G–2d (use of stovetop grill), G17 (preference for new refrigerator over old one), G–18 (person who decided on what refrigerator to purchase), G–22 (use of hot water for laundry), G–24 (loads of laundry dried), G–29 (hours television sets turned on), H–3 (uses of reflective film on windows, blinds or insulated drapes, shutters, or awnings), I–7 (fuel oil demand side management programs), and J–32 (use of photovoltaic cells).

Statutory Authority: Section 2(a) of the Paperwork Reduction Act of 1980, (Pub. L. 96–511), which amended chapter 35 of title 44 United States Code (See 44 U.S.C. 3506(a) and (c)(1)).

Issued in Washington, DC, September 9, 1993.

Yvonne M. Bishop,

Director, Statistical Standards, Energy Information Administration.

BILLING CODE 6450–01–M

Form EIA-457A (1993)

NEW HOME SUPPLEMENT

BOX 20

INTERVIEWER: CHECK FOLDOUT PAGE. ASK THIS SECTION IF SINGLE-FAMILY HOME, OWNED (NOT RENTED), AND BUILT IN 1988 OR LATER. OTHERWISE GO TO THE LIGHTING SUPPLEMENT, IF HOUSEHOLD HAS BEEN SELECTED FOR THE LIGHTING SUPPLEMENT. (SEE THE HOUSING UNIT RECORD SHEET.)

INTERVIEWER READ: "Since this is a (relatively) new house, I have a few questions about this house."

NH-1. Do you know which side of your home faces the South?

YES 1 1234
NO ..... 0 –> [NH-3]

If "YES" on NH-1, ASK:

NH-2. Using your best estimate, does the side of your home facing the South have more, the same, or less glass area than the North side of your home?

MORE GLASS AREA 1
SAME GLASS AREA 2 1235
LESS GLASS AREA 3
NO GLASS AREA ON SOUTH SIDE 0

INTERVIEWER READ: "Here are some questions that relate to the technical characteristics of your house. You might remember some of these items from the materials you received when you bought the house."

NH-3. What is your best estimate of the R-value of the insulation in the roof or ceiling, or perhaps you know the inches of insulation? (R-VALUES RANGE FROM 4 TO 49.)

R-VALUE ☐ OR INCHES ☐ ... –> [NH-5]
DON'T KNOW 96 1236-39
NO INSULATION ..... 00 –> [NH-5]

Form EIA-457A (1993)

IF "DON'T KNOW" ON NH-3, ASK:

NH-4. When you purchased your home, were you informed that the insulation in your roof or ceiling meets or exceeds the building code for your location?

MEETS THE BUILDING CODES 1
EXCEEDS THE BUILDING CODES 2 *1240*
DON'T REMEMBER/NOT INFORMED 6

INTERVIEWER: CHECK FOLDOUT PAGE. IF CENTRAL AIR CONDITIONING CONTINUE, OTHERWISE SKIP TO NH-7.

IF HAS CENTRAL AIR-CONDITIONING, ASK; OTHERWISE --> [NH-7]

NH-5. For your central air-conditioner, what is your best estimate of the size of the cooling capacity in tons or Btu? (12,000 Btu per hour = 1 ton cooling capacity.)

TONS [ ] OR BTU/HOUR [ ] *1241-48*

DON'T KNOW 96

NH-6. Is your air-conditioner a high-efficiency unit?

YES 1
NO 0 *1249*
DON'T KNOW 6

NH-7. Is your heating equipment a high-efficiency unit?

YES 1
NO 0 *1250*
DON'T KNOW 6

NH-8. Can you set thermostats for your main heating equipment so that you have different temperatures in sections of your home? This is usually called "Zoned-Heating".

YES 1
NO/NO THERMOSTAT 2 *1251*
DON'T KNOW 6

Form EIA-457A (1993)

NH-9. Please don't try to find them, but we are interested in whether you maintain files or still have the brochures pertaining to information about the characteristics of your home and major appliances?

YES	1	
NO	0	1252
DON'T KNOW	6	

INTERVIEWER: SEE THE HOUSING UNIT RECORD SHEET. IF THE HOUSING UNIT HAS BEEN SELECTED FOR THE LIGHTING SUPPLEMENT, GO TO THE LIGHTING SUPPLEMENT, OTHERWISE CONTINUE WITH SECTION O.

[FR Doc. 93–22455 Filed 9–13–93; 8:45 am]
BILLING CODE 4158-9-C

Federal Energy Regulatory Commission

[Project Nos. 2451–004, 2452–007, and 2468–003 Michigan]

Consumers Power Co.; Availability of Draft Multiple Project Environmental Assessment

September 8, 1993.

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission's (Commission's) regulations, 18 CFR part 380 (Order No. 486, 52 FR 47897), the Office of Hydropower Licensing has reviewed the three applications for major license for the existing Rogers, Hardy, and Croton Hydroelectric Projects, located on the Muskegon River in Mecosta and Newaygo Counties, in southwest Michigan, and has prepared a Draft Multiple Project Environmental Assessment (MPEA) for the projects in cooperation with the U.S. Department of Agriculture, Forest Service, Huron-Manistee National Forests. In the draft MPEA, the Commission and Forest Service staffs analyzed the site-specific and cumulative environmental effects of the existing projects, as proposed in a Settlement Agreement reached between Consumers Power Company and the state and Federal resource agencies. The Commission staff has concluded that approval of the applications for new license, with appropriate enhancement measures, would not constitute a major Federal action significantly affecting the quality of the human environment.

Copies of the draft MPEA are available for review in the Public Reference Branch, room 3104, of the Commission's offices at 941 North Capitol Street, NE., Washington, DC 20426.

Please submit any comments within 45 days from the date of this notice and should be addressed to Lois D. Cashell, Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Please affix Project Nos. 2451, 2452, and 2468 to all comments. For further information, please contact Frank Karwoski, Environmental Coordinator, at (202) 219–2782.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22347 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. JD93–14300T New Mexico–53]

Department of the Interior, Bureau of Land Management; NGPA Notice of Determination by Jurisdictional Agency Designating Tight Formation

September 8, 1993.

Take notice that on September 2, 1993, the United States Department of the Interior's Bureau of Land Management (BLM) submitted the above-referenced notice of determination pursuant to § 271.703(c)(3) of the Commission's regulations, that the Chacra Formation underlying certain lands in the Jicarilla Area of the Otero Chacra Pool located in Rio Arriba County, New Mexico, qualifies as a tight formation under section 107(b) of the Natural Gas Policy Act of 1978. The area of application covers approximately 2,560 acres, all of which are located on the Jicarilla Apache Indian Reservation. The recommended area is described as follows:

Township 25 North, Range 5 West

Sections 21–22: S/2
Sections 27–28: All
Sections 33–34: N/2

The notice of determination also contains BLM's findings that the referenced portion of the Chacra Formation meets the requirements of the Commission's regulations set forth in 18 CFR part 271.

The application for determination is available for inspection, except for material which is confidential under 18 CFR 275.206, at the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Persons objecting to the determination may file a protest, in accordance with 18 CFR 275.203 and 275.204, within 20 days after the date this notice is issued by the Commission.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22348 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. JD93–13997T Colorado–61]

Department of the Interior, Bureau of Land Management; NGPA Amended Notice of Determination by Jurisdictional Agency Denying Designation of Tight Formation

September 8, 1993.

Take notice that on September 3, 1993, the United States Department of Interior, Bureau of Land Management (BLM) amended its notice of determination that was filed in the above-referenced proceedings on August 16, 1993, pursuant to § 271.703(c)(3) of the Commission's regulations. The August 16, 1993 notice determined that a portion of the Upper Lewis Shale Formation (Blue Gravel Sand) in Moffat County, Colorado, does not qualify as a tight formation under section 107(b) of the Natural Gas Policy Act of 1978 (NGPA).

The amended notice of determination reduces the geographical area recommended to be denied tight formation designation. The amended area covers only the 2,080 acres, more or less, of Federal Lands described as follows:

Township 9, North, Range 90 West

Section 31: W/2

Township 9 North, Range 91 West

Section 23: E/2
Section 24: W/2
Section 25: All
Section 26: NE/4
Section 35: E/2

The notice of determination also contains BLM's findings that the referenced portion of the Pictured Cliffs Formation does not meet the requirements of the Commission's regulations set forth in 18 CFR part 271.

The application for determination is available for inspection, except for material which is confidential under 18 CFR 275.206, at the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Persons objecting to the determination may file a protest, in accordance with 18 CFR 275.203 and 275.204, within 10 days after the date this notice is issued by the Commission.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22346 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. JD93–14301T Colorado–62]

Department of the Interior, Bureau of Land Management; NGPA Notice of Determination by Jurisdictional Agency Designating Tight Formation

September 8, 1993.

Take notice that on September 2, 1993, the United States Department of Interior, Bureau of Land Management (BLM) submitted the above-referenced notice of determination pursuant to § 271.703(c)(3) of the Commission's regulations, that a portion of the Corcoran-Cozzette Formation in the Lower Mesaverde Members, Cozzette and Corcoran Sandstones in Garfield County, Colorado, qualifies as a tight formation under section 107(b) of the Natural Gas Policy Act of 1978 (NGPA).

The recommended area encompasses approximately 201,160 acres of which approximately 56% are Federal Lands and 46% are Fee Lands described as follows:

Township 5 South, Range 98 West
Township 5 South, Range 99 West
Township 5 South, Range 100 West
Township 6 South, Range 98 West
Township 6 South, Range 99 West
Township 6 South, Range 100 West
Township 7 South, Range 98 West
Township 7 South, Range 99 West
Township 7 South, Range 100 West
Sections 1–36: All

The notice of determination also contains BLM's findings that the referenced portion of the Corcoran-Cozzette Formation meets the requirements of the Commission's regulations set forth in 18 CFR part 271.

The application for determination is available for inspection, except for material which is confidential under 18 CFR 275.206, at the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Persons objecting to the determination may file a protest, in accordance with 18 CFR 275.203 and 275.204, within 20 days after the date this notice is issued by the Commission.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22349 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP93–190–000]

Algonquin Gas Transmission Co.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 3, 1993, Algonquin Gas Transmission Company (Algonquin) tendered for filing as part of its FERC Gas Tariff, Fourth Revised Volume No. 1, the following revised tariff sheets, with a proposed effective date of October 1, 1993:

First Revised Sheet No. 20A
Original Sheet No. 98
Sheet No. 99

Algonquin states that the purpose of this filing is to establish the balance and allocation of Stranded Costs to be paid by Algonquin to Texas Eastern Transmission Corporation (Texas Eastern) pursuant to Texas Eastern's direct bill of Stranded Costs filed on August 31, 1993.

Algonquin notes that copies of this filing were served upon each affected party and interested state commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with 18 CFR 385.214 and 385.211 of the Commission's Rules and Regulations. All such motions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the public reference room.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22353 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP93–191–000]

Algonquin Gas Transmission Co.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 3, 1993, Algonquin Gas Transmission Company (Algonquin) tendered for filing as part of its FERC Gas Tariff, Fourth Revised Volume No. 1, First Revised Sheet No. 97, with a proposed effective date of October 1, 1993.

Algonquin states that the purpose of this filing is to provide for the recovery of certain transition costs associated with upstream capacity retained by Algonquin. Specifically, Algonquin seeks to recover gas supply realignment (GSR) costs associated with retained capacity that are to be paid by Algonquin to Texas Eastern Transmission Corporation (Texas Eastern).

Algonquin requests that the Commission waive § 154.22 of the Commission's regulations to the extent necessary in order to permit this application to take effect on October 1, 1993.

Algonquin states that copies of this tariff filing were mailed to all customers of Algonquin and interested state commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with §§ 385.214 and 385.211 of the Commission's Rules and Regulations. All such motions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22354 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. CP93–696–000]

Arkla Energy Resources Co.; Request Under Blanket Authorization

September 8, 1993.

Take notice that on August 30, 1993, Arkla Energy Resources Company (AER), 525 Milam Street, P.O. Box 21734, Shreveport, Louisiana 71151 filed in Docket No. CP93–696–000 a request pursuant to §§ 157.205, 157.211 and 157.212 of the Commission's Regulations under the Natural Gas Act for authorization to construct and operate certain facilities in Arkansas, under its blanket certificate issued in Docket No. CP82–384–000 and CP82–384–001, all as more fully set forth in the request which is on file with the Commission and open to public inspection.

AER specifically proposes to construct and operate a new delivery tap and meter station for delivery of gas to Arkansas Louisiana Gas Company's customers in Arkansas County, Arkansas. AER states that the volume of gas that will be delivered through this tap is approximately 7,300 Mcf annually and 80 Mcf on a peak day. AER indicates that the proposed facilities will be constructed at an estimated cost of $15,958 and that Arkansas Louisiana Gas Company will reimburse AER for all construction costs. AER states that it has sufficient capacity to accomplish the deliveries referenced herein without detriment or disadvantage to its other customers.

Any person or the Commission's staff may, within 45 days after issuance of the instant notice by the Commission, file pursuant to Rule 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.214) a motion to intervene or notice of intervention and pursuant to § 157.205 of the Regulations under the Natural Gas Act (18 CFR 157.205) a protest to the request. If no protest is filed within the time allowed therefor, the proposed activity shall be deemed to be authorized effective the date after the time allowed for filing a protest. If a protest is filed and not withdrawn within 30 days after the time

allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to Section 7(c) of the Natural Gas Act.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22344 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. TM94–1–84–000]

Caprock Pipeline Co.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 1, 1993, Caprock Pipeline Company, (Caprock Pipeline), tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, the following tariff sheets with a proposed effective date of October 1, 1993:

First Revised Sheet No. 4
First Revised Sheet No. 5
First Revised Sheet No. 28

Caprock Pipeline states that the purpose of these changes is to establish the ACA surcharge in its rates for fiscal year 1993 and to note the new telephone number for their electronic bulletin board supplier, Enernet.

Caprock Pipeline states that a copy of this filing has been served upon all of Caprock Pipeline's customers.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with §§ 385.214 and 385.211 of the Commission's Rules and Regulations. All such motions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the public reference room.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22355 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. CP93–552–000]

Carnegie Natural Gas Company and Carnegie Interstate Pipeline Co., Technical Conference

September 8, 1993.

A technical conference will be held to discuss issues raised in the above-captioned proceeding on Thursday, October 14, 1993, at 10 a.m., in room 3400–B at the offices of the Federal Energy Regulatory Commission, 825 N. Capitol Street, NE., Washington, DC 20426.

All interested persons and Staff are permitted to attend. However, attendance does not confer party status.

For additional information, contact Timothy W. Gordon at (202) 208–2059.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22343 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. CP89–5–005]

CNG Transmission Corp., Sale of Natural Gas

September 8, 1993.

Take notice that on January 21, 1992, CNG Transmission Corporation (CNG), 445 West Main Street, PO Box 2450, Clarksburg, West Virginia, submitted the following information regarding the sale of natural gas to be made to an affiliate under CNG's Rate Schedule USA, pursuant to the authorization granted by an order issued December 20, 1988, in Docket No. CP89–5–000.[1]

(1) Name of Buyer: The East Ohio Gas Company

(2) Location of Buyer: Cleveland, Ohio.

(3) Affiliation between CNG and Buyer: East Ohio is an affiliate of CNG, owned by the same parent, Consolidated Natural Gas Company.

(4) Term of Sale: The agreement is for a one-day sale on September 30, 1993.

(5) Estimated Total and Daily Quantities: The maximum daily quantity for the one day sale is no more than 3,000,000 Dt.

(6) maximum sales rate: As with all USA Sales, the maximum sales rates will be the 100% load factor ACD rate.

Minimum sales rate: The minimum rate will be the actual Weighted average Cost of Gas ("WACOG"), plus adjustments

Rate to be charged during the billing period: The actual price within this range will be primarily a function of CNG's actual costs for the injection period, the price of which will not be known exactly until after the sale is made.

Any interested party desiring to make any protest with reference to this sale of natural gas should file with the Federal Energy Regulatory Commission, Washington, DC 20426, within 30 days after issuance of the instant notice by the Commission, pursuant to the order of December 20, 1988. If no protest is filed within that time or the Commission denies the protest, the proposed sale may continue until the underlying contract expires. If a protest is filed, CNG may sell gas for 120 days from the date of commencement of service or until a termination order is issued, whichever is earlier.

[1] CNG Transmission Corporation, 45 FERC ¶61,446 (1988).

Lois D. Cashell,

Secretary.

[FR Doc. 93–22341 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. TM94–1–15–000]

Mid Louisiana Gas Co.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 1, 1993, Mid Louisiana Gas Company (Mid Louisiana) tendered for filing as part of its FERC Gas Tariff, Third Revised Volume No. 1, the following tariff sheets with a proposed effective date of October 1, 1993:

First Revised Sheet No. 4
First Revised Sheet No. 4A
First Revised Sheet No. 4B

Mid Louisiana states that the purpose of filing the revised tariff sheets is to reflect a revision to the unit rates for the collection of the Annual Charges imposed by Section 382 of the Commission's Regulations.

Mid Louisiana states that this filing is being made in accordance with Section 22 of Mid Louisiana's FERC Gas Tariff.

Mid Louisiana states that copies of this filing have been mailed to Mid Louisiana's customers and interested state commissions.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426 in accordance with §§ 385.211 and 385.214, the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such petitions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a petition to intervene. Copies of this filing are on file with the

Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22359 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. CP93–700–000]

Paiute Pipeline Co.; Request Under Blanket Authorization

September 8, 1993.

Take notice that on September 2, 1993, Paiute Pipeline Company (Paiute), P.O. Box 94197, Las Vegas, Nevada 89193–4197, filed in Docket No. CP93–700–000 a request pursuant to § 157.205 of the Commission's Regulations under the Natural Gas Act (18 CFR 157.205) for authorization to construct and operate a new delivery tap to deliver natural gas to R.R. Donnelley and Sons Company (Donnelley), an end user, under Paiute's blanket certificate issued in Docket No. CP84–739–000 pursuant to section 7 of the Natural Gas Act, all as more fully set forth in the request which is on file with the Commission and open to public inspection.

Specifically, Paiute proposes to construct and operate a delivery tap on its Reno Lateral in Washoe County, Nevada to deliver natural gas, transported by Paiute, directly to Donnelley. Paiute states that it has been informed that Donnelley would construct pipeline facilities to connect the proposed delivery tap to its plant.

Paiute further states that its existing tariff does not prohibit the addition of new delivery points and that it has sufficient capacity to provide for the proposed deliveries without any detriment or disadvantage to its existing customers. Paiute avers that deliveries to the proposed tap will have little or no effect on its peak day and annual deliveries.

Any person or the Commission's staff may, within 45 days after issuance of the instant notice by the Commission, file pursuant to Rule 214 of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention and pursuant to § 157.205 of the Regulations under the Natural Gas Act (18 CFR 157.205) a protest to the request. If no protest is filed within the time allowed therefor, the proposed activity shall be deemed to be authorized effective the day after the time allowed for filing a protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to Section 7 of the Natural Gas Act.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22345 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. CP92–459–002]

Texas Eastern Transmission Corp.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on August 31, 1993, Texas Eastern Transmission Corporation (Texas Eastern), tendered for filing as part of its FERC Gas Tariff, Sixth Revised Volume No. 1, the tariff sheets listed on Appendix A of the filing.

By this filing, and in compliance with ordering paragraph (G) of the Commission's July 20, 1993, Order Approving Abandonment, Authorizing Acquisition, and Granting Motion for Waiver, Texas Eastern states that it is filing tariff sheets to establish new incremental, open-access transportation rate schedules for transportation on new pipeline facilities, known as the "Lebanon Lateral", for customers using that portion of the Lebanon Lateral capacity not committed to Texas Eastern.

Texas Eastern requests that the Commission waive all necessary rules and regulations to permit the tariff sheets listed on Appendix A to become effective on October 1, 1993. Texas Eastern states that pursuant to and in compliance with ordering paragraph (J) of the July 20 Order, Texas Eastern will notify the Commission upon completion of the acquisition within 10 days thereof.

Texas Eastern states that copies of the filing were served on Texas Eastern's jurisdictional customers and interested state commissions.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rule 211 of the Commission's Rules of Practice and Procedure. All such protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22342 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP92–171–003]

Texas Eastern Transmission Corp.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 3, 1993, Texas Eastern Transmission Corporation (Texas Eastern) tendered for filing as part of its FERC Gas Tariff, Fifth Revised Volume No. 1, the following tariff sheets, with a proposed effective date of July 1, 1992:

Sub Sixth Revised Sheet No. 526
Sub Sixth Revised Sheet No. 528

Texas Eastern states that the above tariff sheets are being filed in compliance with Ordering Paragraph (D) of the Commission's Order on Technical Conference, Compliance Filing, and Rehearing issued August 4, 1993 in the subject docket (August 4 Order). Texas Eastern states that the August 4 Order required Texas Eastern to revise its ASA tariff provision: (1) "to ensure that Texas Eastern's non-sales ASA Rate Schedule customers are not responsible for any fuel-use underrecoveries Texas Eastern might incur related to service to Texas Eastern's non-sales, non-ASA Rate Schedule customers"; and (2) to incorporate the tariff revisions proposed in Texas Eastern's August 21, 1992 data response. Texas Eastern states that the above tariff sheets comply with these requirements.

Texas Eastern states that copies of the filing were served on all firm customers of Texas Eastern Transmission Corporation and interested state commissions. In addition, copies of the filing have been served upon all shippers under Rate Schedules IT–1 and PTI.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's regulations. All such protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22351 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP93–189–000]

Texas Gas Transmission Corp.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 2, 1993, Texas Gas Transmission Corporation (Texas Gas) tendered for filing as part of its FERC Gas Tariff, Original Volume No. 1, and First Revised Volume No. 2A, the tariff sheets listed in Appendix A to the filing, with a proposed effective date of October 1, 1993.

Texas Gas states that the proposed tariff sheets, listed in Appendix A of the filing, are being filed in order to establish a cost allocation methodology and recovery mechanism pursuant to Commission Order No. 528, whereby Texas Gas would recover 75% of an additional $3.4 million in Take-or-Pay (TOP) Settlement Payments attributable to Texas Gas' obligation to indemnify certain producers for certain royalty attributable to prior take-or-pay settlement payments. Specifically, Texas Gas proposes to absorb 25% of these additional TOP Settlement Payments, recover 25% through a monthly fixed charge to current firm customers and recover the remaining 50% via a volumetric commodity surcharge on throughput, including both sales and transportation volumes.

Texas Gas states that copies of the revised tariff sheets are being mailed to Texas Gas' jurisdictional customers, interested state commissions and each person listed on the official service list previously compiled by the Secretary in these proceedings.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with 18 CFR 385.214 and 385.211 of the Commission's Rules and Regulations. All such motions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the public reference room.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22352 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. TM94–1–29–000]

Transcontinental Gas Pipe Line Corp.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 1, 1993, Transcontinental Gas Pipe Line Corporation (TGPL) tendered for filing as part of its FERC Gas Tariff, Third Revised Volume No. 1, Seventh Revised Sheet No. 60, with a proposed effective date of October 1, 1993.

TGPL states that the purpose of the filing is to reflect an increase in the Annual Charge Adjustment (ACA) Charge in the commodity portion of TGPL's sales and transportation rates. Pursuant to Order No. 472, the Commission has assessed TGPL its ACA unit rate of $0.0026/Mcf ($0.0025/dt on TGPL's system) for the annual period commencing October 1, 1993.

TGPL states that copies of the filing are being mailed to affected customers and interested state commissions.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426 in accordance with §§ 385.211 and 385.214 the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such petitions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a petition to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22358 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. TM94–1–82–000]

Viking Gas Transmission Co.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 3, 1993, Viking Gas Transmission Company (Viking), tendered for filing as part of its FERC Tariff, Original Revised Volume No. 1, Twenty-Fourth Revised Sheet No. 6, and First Revised Volume No. 1, Substitute Original Sheet No. 6, with a proposed effective date of October 1, 1993.

Viking states that this filing reflects the new Annual Charge Adjustment of $.0026 per dekatherm.

Viking states that copies of the filing have been mailed to all of its jurisdictional customers and affected state regulatory commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure. All such motions or protests should be filed on or before September 15, 1993. Protests will be considered by the commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22356 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. TM94–1–52–000]

Western Gas Interstate Co.; Proposed Changes in FERC Gas Tariff

September 8, 1993.

Take notice that on September 2, 1993, Western Gas Interstate Company (Western), tendered for filing as part of its FERC Gas Tariff, Third Revised Volume No. 1, the following tariff sheets with an effective date of October 1, 1993.

1st Revised Sheet No. 10
1st Revised Sheet No. 11

Western states that, its filing proposes changes to its rates in accordance with the terms of the Annual Charge Adjustment Clause of its FERC Gas Tariff.

Western states that the tariff sheets proposed to become effective October 1, 1993 is to account for the increase in Western's Annual Charge Adjustment (ACA). The adjustment of the ACA Surcharge is determined each fiscal year, and reflects an increase of $0.0002/MMbtu from the currently effective ACA Surcharge.

Finally, Western states that copies of the filing were served upon Western's transmission system customers and interested state regulatory commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with §§ 385.211 and 385.214 of the Commission's Rules

and Regulations. All such motions or protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22357 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

[Docket No. RP93–109–005]

Williams Natural Gas Co.; Supplemental Compliance Filing

September 8, 1993.

Take notice that on September 1, 1993, Williams Natural Gas Company (WNG) tendered for filing the following tariff sheets to its proposed tariff applicable to restructured services, Second Revised Volume No. 1:

Second Substitute Original Sheet No. 283
Substitute Original Sheet Nos. 300–304

The proposed effective date of these tariff sheets is October 1, 1993.

WNG states that the tendered tariff sheets list each customer's initial allocation of capacity on WNG's pipeline system which resulted from the open season conducted during August, 1993 as required by the August 2, 1993 order in the above referenced docket.

WNG states that a copy of it filing was served on all parties in this docket and on all jurisdictional customers and affected state commissions.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with § 385.211 of the Commission's Rules and Regulations. All such protests should be filed on or before September 15, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Copies of this filing are on file with the Commission and are available for public inspection in the public reference room.

Lois D. Cashell,

Secretary.

[FR Doc. 93–22350 Filed 9–13–93; 8:45 am]

BILLING CODE 6717–01–M

ENVIRONMENTAL PROTECTION AGENCY

[ECAO–RTP–0746; FRL–4728–7]

Three Review Workshops on Draft Chapters of a Revised Air Quality Criteria for Ozone and Related Photochemical Oxidants

AGENCY: Environmental Protection Agency.

ACTION: Notice of public meetings.

SUMMARY: Three review workshops will be held by the Environmental Criteria and Assessment Office (ECAO) of EPA's Office of Health and Environmental Assessment to facilitate preparation of the chapters dealing with environmental ozone/oxidants concentrations, ecological effects, and atmospheric ozone and precursors for an external review draft of the revised Air Quality Criteria for Ozone and Related Photochemical Oxidants.

DATES: The first workshop, which addresses environmental ozone/oxidants concentrations, will be held on September 23, 1993, from 9 a.m. to 5 p.m. at EPA's Environmental Research Center, at the intersection of Alexander Drive and Highway 54, in Research Triangle Park, NC. The second workshop, which addresses ecological effects, will be held September 27 through September 29, 1993, from 8:30 a.m. to 5 p.m. each day at the Valley River Inn, 1000 Valley River Way, Eugene, OR 97401, telephone 1–800–543–8266. The third workshop, which addresses atmospheric ozone and precursors, will be held September 29 through October 1, 1993, also at EPA's Environmental Research Center in Research Triangle Park, NC. Meeting times on September 29 and 30 will be from 9 a.m. to 4:30 p.m. and on October 1 will be from 8:30 a.m. to 12 noon. All three workshops are open to the public.

FOR FURTHER INFORMATION CONTACT: Mr. William G. Ewald, manager for the chapter on environmental ozone/oxidants concentrations, U.S. Environmental Protection Agency, ECAO, MD–52, Research Triangle Park, NC 27711; telephone 919–541–4164, for information on the first workshop. Information on the second workshop may be obtained from Dr. J.H.B. Garner, manager for the chapter on ecological effects, at the same address, but telephone 919–541–4153. For information on the third workshop, contact Ms. Beverly E. Tilton, manager for the chapter on atmospheric ozone and precursors, at the same address but telephone 919–541–4161.

SUPPLEMENTARY INFORMATION: As discussed in a previous call for information (57 FR 38832, August 27, 1992), EPA is undertaking to review and, where appropriate, update and revise the document, Air Quality Criteria for Ozone and Related Photochemical Oxidants. As part of this review, the first workshop will cover a draft chapter (Chapter 4) on environmental ozone/oxidants concentrations, patterns, and exposure estimates. The second workshop will cover a draft chapter (Chapter 5) on the effects of ozone on managed and natural ecosystems, including crops. The third worksnop will cover a draft chapter (Chapter 3) on the atmospheric chemistry, meteorological and transport processes, and analytical methods for ozone/oxidants; and precursor sources, emissions, analytical methods, and concentrations. The particular chapter covered at each workshop will be available to the public at the time of the workshop. Members of the public will have an opportunity at the workshops to make brief, oral statements. Interested parties also are invited to assist the EPA in developing and refining the scientific information base for ozone by submitting new information on the topics covered at these three workshops. To be considered for inclusion in the review process, submitted information should be published or accepted for publication in a peer-reviewed, scientific journal.

Dated: September 7, 1993.

Gary J. Foley,

Acting Assistant Administrator for Research and Development.

[FR Doc. 93–22439 Filed 9–13–93; 8:45 am]

BILLING CODE 6560–50–M

[FRL–4729–2]

Science Advisory Board Executive Committee, Environmental Futures Committee; Public Meetings

Pursuant to the Federal Advisory Committee Act, Public Law 92–463, notice is hereby given that the Environmental Futures Committee of the Science Advisory Board (SAB) will meet from 8:30 a.m. until 5 p.m. on Thursday, September 30, 1993 at Crystal Station, Conference Room C, 2nd Floor, 2800 Crystal Drive, Arlington, Virginia 22202.

The Environmental Futures Committee (EFC) was formed by the SAB at the request of Administrator Browner to assist the Agency in anticipating environmental problems, issues and opportunities. The charge to this Committee includes: Developing a

procedure for short-and long-term forecasting of natural and anthropogenic developments which may affect environmental quality and its protection; develop detailed examinations procedures and apply them to some future developments; and draw implications from the examinations of future developments and recommend actions for EPA to address them. This meeting will focus on orientation for the Standing Committees and the Committee will receive briefings from the Office of Policy, Planning and Evaluation (OPPE) on driving factors and an overview of the Futures methods.

This meeting is open to the public, but seating is limited and available on a first come basis. Any member of the public wishing further information concerning the meeting or who wishes to submit oral or written comments should contact the Designated Federal Official, Mr. Robert Flaak, Science Advisory Board (A–101F), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460; telephone (202) 260–6552; FAX (202) 260–7118.

Dated: September 2, 1993.

A. Robert Flaak,

Acting Staff Director, Science Advisory Board.

[FR Doc. 93–22442 Filed 9–13–93; 8:45 am]

BILLING CODE 6560–50–M

[FRL–4729–6]

Science Advisory Board Environmental Health Committee; Open Conference Call Meeting

Under Public Law 92–463, notice is hereby given that the Environmental Health Committee (EHC) of the Science Advisory Board of EPA will conduct a conference call meeting Friday, September 24, 1993 from 3 to 5 p.m. EDT. The meeting is open to the public.

At this meeting, the Committee will review methodologies for estimating health benefits resulting from corrective actions at hazardous waste sites, as incorporated in the draft document Regulatory Impact Analysis (RIA) for the Final Rulemaking on Corrective Action for Solid Waste Management Units developed by the Office of Solid Waste. The Committee will address a variety of issues related to the quantification of these benefits, particularly the exposure and health risk assumptions underlying the estimates.

Requests for copies of the draft RIA document should be directed to the Resource Conservation and Recovery Act (RCRA) Hotline (1–800–424–9346). The document is not available from the Science Advisory Board. Questions concerning its content should be addressed to Mr. Gary Ballard (OS–311), Regulatory Analysis Branch, Office of Solid Waste, U.S. Environmental Protection Agency, 401 M Street, SW., Washington DC 20460 (202) 260–2429.

Members of the public desiring additional information about the conduct of the meeting or the agenda, or who wish to call into the conference should contact Mr. Samuel Rondberg (A101F), Science Advisory Board, U.S. Environmental Protection Agency, 401 M Street, SW., Washington DC 20460 (202) 260–2559 or fax to (202) 260–7118. Anyone wishing to provide public comment for the meeting should contact Mr. Rondberg by September 22, and be prepared to fax any materials to the participants. Opportunities for oral comment will be limited to no more than five minutes per speaker and no more than fifteen minutes in total. A fixed number of conference lines have been reserved for the meeting and participation will be on an "as available basis."

Dated: September 9, 1993.

A. Robert Flaak,

Acting Staff Director, Science Advisory Board.

[FR Doc. 93–22557 Filed 9–13–93; 8:45 am]

BILLING CODE 6560–50–P

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

Agency Report Forms Under OMB Review

AGENCY: Equal Employment Opportunity Commission.

ACTION: Request for comments.

SUMMARY: Under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35), agencies are required to submit proposed information collection requests to OMB for review and approval, and to publish a notice in the **Federal Register** notifying the public that the agency has made such a submission. The proposed report form under review is listed below.

DATES: Comments must be received on or before October 29, 1993. If you anticipate commenting on a report form but find that time to prepare will prevent you from submitting comments promptly, you should advise the OMB Reviewer and Agency Clearance Officer of your intent as early as possible.

ADDRESSES: Copies of the proposed report form, the request for clearance (Standard Form 83), supporting statement, and other documents submitted to OMB for review may be obtained from the Agency Clearance Officer. Comments on the item listed should be submitted to the Agency Clearance Officer and the OMB Reviewer.

FOR FURTHER INFORMATION CONTACT:

EEOC Agency Clearance Officer: Margaret P. Ulmer, Office of Management, room 2204, 1801 L Street, NW., Washington, DC 20507; Telephone: (202) 663–4279.

OMB Reviewer: Joseph Lackey, Human Resources and Housing Branch, Office of Information and Regulatory Affairs, Office of Management and Budget, room 3208, New Executive Office Building, Washington, DC 20503; Telephone: (202) 395–7316.

Type of Request: Extension (No change)

Title: Employer Information Report EEO–1

Form Number: Standard Form 100

Frequency of Report: Annually

Type of Respondent: Private employers with 100 or more employees and certain Federal government contractors with 50 or more employees

Standard Industrial Classification (SIC) Code: Multiple

Description of Affected Public: IND/HHID and Farms and Businesses/INST

Responses: 126,700

Reporting Hours: 503,500

Federal Cost: $728,000

Applicable under Section 3504(h) of Public Law 96–511: Not applicable

Number of Forms: 1

Abstract-Needs/Users: EEO–1 data are used by EEOC to investigate charges of discrimination against employers in private industry. Data are shared with several Federal government agencies, particularly the Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor. Under Section 709(d) of Title VII of the Civil Rights Act of 1964, as amended, EEO–1 data are also shared with approximately 83 State and local FEP agencies.

Dated: September 8, 1993.

For the Commission.

Patricia C. Johnson,

Acting Director of Management, Equal Employment Opportunity Commission.

[FR Doc. 93–22449 Filed 9–13–93; 8:45 am]

BILLING CODE 6570–06–M

FEDERAL DEPOSIT INSURANCE CORPORATION

Information Collection Submitted to OMB For Review

AGENCY: Federal Deposit Insurance Corporation.

ACTION: Notice of information collection submitted to OMB for review and approval under the Paperwork Reduction Act of 1980.

SUMMARY: In accordance with requirements of the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35), the FDIC hereby gives notice that it has submitted to the Office of Management and Budget a request for OMB review of the information collection system described below.

Type of Review: Extension of the expiration date of a currently approved collection without any change in the substance or method of collection.
Title: Community Reinvestment Act Statement and Recordkeeping.
Form Number: None.
OMB Number: 3064–0092.
Expiration Date of OMB Clearance: October 31, 1993.
Frequency of Response: On occasion (recordkeeping).
Respondents: Insured nonmember banks.
Number of Respondents: 7,387.
Annual Hours Per Recordkeeper: 68.
Total Recordkeeping Hours: 502,316.
OMB Reviewer: Gary Waxman, (202) 395–7340, Office of Management and Budget, Paperwork Reduction Project (3064–0092), Washington, DC 20503.
FDIC Contact: Steven F. Hanft, (202) 898–3907, Office of the Executive Secretary, room F–400, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.
Comments: Comments on this collection of information are welcome and should be submitted before November 15, 1993.

ADDRESSES: A copy of the submission may be obtained by calling or writing the FDIC contact listed above. Comments regarding the submission should be addressed to both the OMB reviewer and the FDIC contact listed above.

SUPPLEMENTARY INFORMATION: Under the Community Reinvestment Act (CRA) and Regulation 12 CFR part 345, the FDIC requires each insured state nonmember bank to adopt a CRA statement, post a CRA notice, and maintain a CRA public file. They must also disclose their CRA ratings and written Performance Evaluations.

Dated: September 8, 1993.
Federal Deposit Insurance Corporation.
Hoyle L. Robinson,
Executive Secretary.
[FR Doc. 93–22361 Filed 9–13–93; 8:45 am]
BILLING CODE 6714–01–M

Information Collection Submitted to OMB for Review

AGENCY: Federal Deposit Insurance Corporation.

ACTION: Notice of information collection submitted to OMB for review and approval under the Paperwork Reduction Act of 1980.

SUMMARY: In accordance with requirements of the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35), the FDIC hereby gives notice that it has submitted to the Office of Management and Budget a request for OMB review of the information collection system described below.

Type of Review: Extension of the expiration date of a currently approved collection without any change in the substance or method of collection.
Title: Procedures for Monitoring Bank Protection Act Compliance.
Form Number: None.
OMB Number: 3064–0095.
Expiration Date of OMB Clearance: October 31, 1993.
Frequency of Response: On occasion (recordkeeping).
Respondents: Insured nonmember banks.
Number of Respondents: 7,400.
Annual Hours Per Recordkeeper: 0.5.
Total Recordkeeping Hours: 3,700.
OMB Reviewer: Gary Waxman, (202) 395–7340, Office of Management and Budget, Paperwork Reduction Project (3064–0092), Washington, DC 20503.
FDIC Contact: Steven F. Hanft, (202) 898–3907, Office of the Executive Secretary, room F–400, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.
Comments: Comments on this collection of information are welcome and should be submitted before November 15, 1993.

ADDRESSES: A copy of the submission may be obtained by calling or writing the FDIC contact listed above. Comments regarding the submission should be addressed to both the OMB reviewer and the FDIC contact listed above.

SUPPLEMENTARY INFORMATION: Insured nonmember banks must keep records to show compliance with the Bank Protection Act.

Dated: September 8, 1993.
Federal Deposit Insurance Corporation.
Hoyle L. Robinson,
Executive Secretary.
[FR Doc. 93–22403 Filed 9–13–93; 8:45 am]
BILLING CODE 6714–01–M

FEDERAL EMERGENCY MANAGEMENT AGENCY

[FEMA–1000–DR]

Kansas; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of Kansas, (FEMA–1000–DR), dated July 22, 1993, and related determinations.

EFFECTIVE DATE: September 7, 1993.

FOR FURTHER INFORMATION CONTACT: Pauline C. Campbell, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472, (202) 646–3606.

SUPPLEMENTARY INFORMATION: The notice of a major disaster for the State of Kansas dated July 22, 1993, is hereby amended to include the following areas among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of July 22, 1993:

Jefferson and Morris Counties for Public Assistance. (Already designated for Individual Assistance.)

Chase, Hodgeman, and Smith Counties for Individual Assistance and Public Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance)

Richard W. Krimm,
Deputy Associate Director, State and Local Programs and Support.
[FR Doc. 93–22430 Filed 9–13–93; 8:45 am]
BILLING CODE 6718–02–M

[FEMA–995–DR]

Missouri; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of Missouri, (FEMA–995–DR), dated July 9, 1993, and related determinations.

EFFECTIVE DATE: September 7, 1993.

FOR FURTHER INFORMATION CONTACT: Pauline C. Campbell, Disaster Assistance Programs, Federal

Emergency Management Agency, Washington, DC 20472, (202) 646–3606.

SUPPLEMENTARY INFORMATION: The notice of a major disaster for the State of Missouri dated July 9, 1993, is hereby amended to include the following area among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of July 9, 1993:

The counties of Crawford and Mississippi for Public Assistance. (Already designated for Individual Assistance.)

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance.)

Richard W. Krimm,

Deputy Associate Director, State and Local Programs and Support.

[FR Doc. 93–22428 Filed 9–13–93; 8:45 am]

BILLING CODE 6718–02–M

[FEMA–999–DR]

South Dakota; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of South Dakota, (FEMA–999–DR), dated July 19, 1993, and related determinations.

EFFECTIVE DATE: September 7, 1993.

FOR FURTHER INFORMATION CONTACT: Pauline C. Campbell, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472, (202) 646–3606.

SUPPLEMENTARY INFORMATION: The notice of a major disaster for the State of South Dakota dated July 19, 1993, is hereby amended to include the following area among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of July 19, 1993:

The county of Ziebach for Individual Assistance and Public Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance.)

Richard W. Krimm,

Deputy Associate Director, State and Local Programs and Support.

[FR Doc. 93–22429 Filed 9–3–93; 8:45 am]

BILLING CODE 6718–02–M

[FEMA–994–DR]

Wisconsin; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of Wisconsin, (FEMA–994–DR), dated July 2, 1993, and related determinations.

EFFECTIVE DATE: September 8, 1993.

FOR FURTHER INFORMATION CONTACT: Pauline C. Campbell, Disaster Assistance Programs, Federal Emergency Management Agency, Washington, DC 20472, (202) 646–3606.

SUPPLEMENTARY INFORMATION: The notice of a major disaster for the State of Wisconsin dated July 2, 1993, is hereby amended to include the following area among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of July 2, 1993:

The county of Brown for Individual Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance.)

Richard W. Krimm,

Deputy Associate Director, State and Local Programs and Support.

[FR Doc. 93–22427 Filed 9–13–93; 8:45 am]

BILLING CODE 6718–02–M

FEDERAL RESERVE SYSTEM

The Colonial BancGroup, Inc., et al.; Formations of; Acquisitions by; and Mergers of Bank Holding Companies

The companies listed in this notice have applied for the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. 1842) and § 225.14 of the Board's Regulation Y (12 CFR 225.14) to become a bank holding company or to acquire a bank or bank holding company. The factors that are considered in acting on the applications are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank or to the offices of the Board of Governors. Any comment on an application that requests a hearing must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at a hearing.

Unless otherwise noted, comments regarding each of these applications must be received not later than October 8, 1993.

A. Federal Reserve Bank of Atlanta (Zane R. Kelley, Vice President) 104 Marietta Street, N.W., Atlanta, Georgia 30303:

1. The Colonial BancGroup, Inc., Montgomery, Alabama; to acquire 100 percent of the voting shares of Colonial Bank of Tennessee, Ardmore, Tennessee.

2. Premier Bancorp, Inc., Baton Rouge, Louisiana; to merge with Alerion Corporation, New Orleans, Louisiana, and thereby indirectly acquire Alerion Bank, New Orleans, Louisiana.

B. Federal Reserve Bank of St. Louis (Randall C. Sumner, Vice President) 411 Locust Street, St. Louis, Missouri 63166:

1. CBT Corporation, Paducah, Kentucky; to acquire 100 percent of the voting shares of Pennyrile Bancshares, Inc., Hopkinsville, Kentucky, and thereby indirectly acquire Pennyrile Citizens Bank and Trust Company, Hopkinsville, Kentucky. **Comments on this application must be received by October 1, 1993.**

2. First National Security Company, DeQueen, Arkansas; to acquire at least 32 percent of the voting shares of First National Bancshares of Hempstead County, Inc., Hope, Arkansas, and thereby indirectly acquire The First National Bank, Hope, Arkansas, and Bank of Blevins, Blevins, Arkansas.

C. Federal Reserve Bank of Minneapolis (James M. Lyon, Vice President) 250 Marquette Avenue, Minneapolis, Minnesota 55480:

1. L&M Bancshares, Inc., Minneapolis, Minnesota; to become a bank holding company by acquiring 100 percent of the voting shares of Plummer State Bank, Plummer, Minnesota.

D. Federal Reserve Bank of Kansas City (John E. Yorke, Senior Vice President) 925 Grand Avenue, Kansas City, Missouri 64198:

1. OMNIBANCORP, Denver, Colorado; to acquire 100 percent of the voting shares of Denver West Bank & Trust, Golden, Colorado.

2. RCB Holding Company, Claremore, Oklahoma; to acquire 80.3 percent of the voting shares of American Exchange Bank, Collinsville, Oklahoma.

3. Rice Insurance Agency, Inc., Strasburg, Colorado; to acquire 80 percent of the voting shares of Banking Group, Ltd., Castle Rock, Colorado, and thereby indirectly acquire The First National Bank of Castle Rock, Castle Rock, Colorado.

Board of Governors of the Federal Reserve System, September 8, 1993.

William W. Wiles,

Secretary of the Board.

[FR Doc. 93-22385 Filed 9-13-93; 8:45 am]

BILLING CODE 6210-01-F

First National Bank Shares, Ltd.; Formation of, Acquisition by, or Merger of Bank Holding Companies; and Acquisition of Nonbanking Company

The company listed in this notice has applied under § 225.14 of the Board's Regulation Y (12 CFR 225.14) for the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. 1842) to become a bank holding company or to acquire voting securities of a bank or bank holding company. The listed company has also applied under § 225.23(a)(2) of Regulation Y (12 CFR 225.23(a)(2)) for the Board's approval under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. 1843(c)(8)) and § 225.21(a) of Regulation Y (12 CFR 225.21(a)) to acquire or control voting securities or assets of a company engaged in a nonbanking activity that is listed in § 225.25 of Regulation Y as closely related to banking and permissible for bank holding companies, or to engage in such an activity. Unless otherwise noted, these activities will be conducted throughout the United States.

The application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Comments regarding the application must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than October 8, 1993.

A. Federal Reserve Bank of Kansas City (John E. Yorke, Senior Vice President) 925 Grand Avenue, Kansas City, Missouri 64198:

1. First National Bank Shares, Ltd., Great Bend, Kansas; to acquire 100 percent of the voting shares of The Home State Building, Inc., Lewis, Kansas, and thereby indirectly acquire The Home State Bank, Lewis, Kansas.

In connection with this application, Applicant also proposes to acquire Lewis Insurance Services, Inc., Lewis, Kansas, and Potpourri Insurance, Inc., Kinsley, Kansas, and thereby engage in the sale of general insurance in the towns of Kinsley and Lewis, Kansas, each with populations of less than 5,000 pursuant to § 225.25(b)(8)(iii)(A) of the Board's Regulation Y.

Board of Governors of the Federal Reserve System, September 8, 1993.

William W. Wiles,

Secretary of the Board.

[FR Doc. 93-22386 Filed 9-13-93; 8:45 am]

BILLING CODE 6210-01-F

Allen D. Gunn, et al.; Change in Bank Control Notices; Acquisitions of Shares of Banks or Bank Holding Companies

The notificants listed below have applied under the Change in Bank Control Act (12 U.S.C. 1817(j)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire a bank or bank holding company. The factors that are considered in acting on the notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(j)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. Once the notices have been accepted for processing, they will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than October 4, 1993.

A. Federal Reserve Bank of Chicago (James A. Bluemle, Vice President) 230 South LaSalle Street, Chicago, Illinois 60690:

1. Allen D. Gunn, Harbor Beach, Michigan; to acquire an additional 9.7 percent of the voting shares of First of Huron Corp., Bad Axe, Michigan, for a total of 24.9 percent, and thereby indirectly acquire First National Bank of Bad Axe, Bad Axe, Michigan, and State Bank of Port Hope, Port Hope, Michigan.

2. Stephen J. Lyon, Christopher J. Lyon, and Michael J. Pint, as Trustees of the George J. Lyon estate; to acquire 26.80 percent of the voting shares of Minowa Bancshares, Inc., Decorah, Iowa, and thereby indirectly acquire Decorah State Bank, Decorah, Iowa, and thereby indirectly acquire First National Bank of Mabel, and Minnesota Bank, National Association, Caledonia, Minnesota.

B. Federal Reserve Bank of Minneapolis (James M. Lyon, Vice President) 250 Marquette Avenue, Minneapolis, Minnesota 55480:

1. Thomas R. Rogers, Minnetonka, Minnesota; acquire an additional 14.82 percent of the voting shares of First Minnetonka Bancorporation, Inc., Minnetonka, Minnesota, as the result of a stock redemption, for a total of 26.67 percent, and thereby indirectly acquire First Minnetonka City Bank, Minnetonka, Minnesota.

C. Federal Reserve Bank of Dallas (Genie D. Short, Vice President) 2200 North Pearl Street, Dallas, Texas 75201-2272:

1. David R. Brooks, Farmersville, Texas, to acquire 8.2 percent; Vincent J. Viola, Chatham, New Jersey, to acquire 32.7 percent; and W. Mark David, McKinney, Texas, to acquire 32.7 percnt of the voting shares of First McKinney Bancshares, Inc., McKinney, Texas, and thereby indirectly acquire First Bank, McKinney, Texas.

Board of Governors of the Federal Reserve System, September 8, 1993.

William W. Wiles,

Secretary of the Board.

[FR Doc. 93-22387 Filed 9-13-93; 8:45 am]

BILLING CODE 6210-01-F

Huntington Bancshares Incorporated, et al.; Notice of Applications to Engage de novo in Permissible Nonbanking Activities

The companies listed in this notice have filed an application under § 225.23(a)(1) of the Board's Regulation Y (12 CFR 225.23(a)(1)) for the Board's approval under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. 1843(c)(8)) and § 225.21(a) of Regulation Y (12 CFR 225.21(a)) to commence or to engage *de novo*, either directly or through a subsidiary, in a nonbanking activity that is listed in § 225.25 of Regulation Y as closely related to banking and permissible for bank holding companies. Unless otherwise noted, such activities will be conducted throughout the United States.

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the

application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Unless otherwise noted, comments regarding the applications must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than October 4, 1993.

A. Federal Reserve Bank of Cleveland (John J. Wixted, Jr., Vice President) 1455 East Sixth Street, Cleveland, Ohio 44101:

1. Huntington Bancshares Incorporated, Columbus, Ohio, and Huntington Bancshares Indiana, Inc., Columbus, Ohio; to acquire Huntington Federal Savings Bank of Illinois, Chicago, Illinois, and thereby engage *de novo* in owning, controlling and operating a savings association pursuant to § 225.25(b)(9) of the Board's Regulation Y.

B. Federal Reserve Bank of Kansas City (John E. Yorke, Senior Vice President) 925 Grand Avenue, Kansas City, Missouri 64198:

1. United Missouri Bancshares, Inc., Kansas City, Missouri; to engage *de novo* through its subsidiary, UMBCDC, Inc., Kansas City, Missouri, in community development activities pursuant to § 225.25(b)(6) of the Board's Regulation Y.

Board of Governors of the Federal Reserve System, September 8, 1993.

William W. Wiles,

Secretary of the Board.

[FR Doc. 93-22388 Filed 9-13-93; 8:45 am]

BILLING CODE 6210-01-F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Final Criteria for Allocation of Funds for Cooperative Agreements for the Model State-Supported Area Health Education Centers Program

The Health Resources and Services Administration (HRSA) announces the final criteria for allocation of available funds for fiscal year (FY) 1993 Cooperative Agreements for the Model State-Supported Area Health Education Centers (AHEC) Program authorized under the authority of section 746(a)(3) of the Public Health Service (PHS) Act, title VII, as amended by the Health Professions Education Extension Amendments of 1992, Public Law 102–408, dated October 13, 1992.

Purpose and Eligibility

Section 746(a)(3) authorizes Federal assistance to any school of medicine or osteopathic medicine that is operating an area health education centers program and that is not receiving financial assistance under section 746(a)(l) (previously section 781(a)(l)) of the PHS Act. In general, an area health education centers program shall be a cooperative program of one or more medical (M.D. and D.O.) school(s) and one or more nonprofit private regional area health education centers.

The statutory authority for the Model State-Supported AHEC Program contains explicit language regarding activities and agreements between the medical and osteopathic schools which develop AHEC programs and the free-standing, community-based area health education centers which provide training sites and resources for the activities. To accomplish these specific tasks, a system of subcontracts is developed between the health professions schools and the independent centers in the communities.

To receive support, programs must meet the requirements of section 746(a)(3) and program regulations as set forth in 42 CFR part 57, subpart MM.

Matching Funds Requirement: Non-Federal Contributions in Cash

With respect to the costs of operating the area health education center program of the school, the school will make available (directly or through donations from public or private entities) non-Federal contributions in cash toward such costs in an amount that is not less than 50 percent of such costs. These funds must be for the express use of the AHEC Program and Centers, and not funds designated for other categorical or specific purposes. Amounts provided by the Federal Government may not be included in determining the amount of non-Federal contributions in cash.

Programmatic Agreements of Model State-Supported AHEC Programs

Certain programmatic agreements are essential to the operation of a model State-supported AHEC program. In operating such a program, the school agrees to:

a. Coordinate the activities of the program with the activities of any office of rural health established by the State or States in which the program is operating;

b. Conduct health professions education and training activities consistent with national and State priorities in the area served by the program in coordination with the National Health Service Corps, entities receiving funds under section 329 or 330, and public health departments; and

c. Cooperate with any entities that are in operation in the area served by the program and that receive Federal or State funds to carry out activities regarding the recruitment and retention of health care providers.

Review Criteria

The review of applications will take into consideration the following criteria:

1. The degree to which the proposed project adequately provides for the program requirements set forth in section 746 (a)(3) and program regulations as cited above.

2. The capability of the applicant to carry out the proposed project; and

3. The extent of the need of the area to be served by the proposed model State-supported area health education center program.

Degree of Federal Involvement in the Planning, Development and Operation of Model State-Supported Area Health Education Centers Program

Personnel of the Bureau of Health Professions have substantial programmatic involvement with the planning, developing, and administering of the AHEC projects by:

1. Reviewing and approving plans, upon which continuation of the cooperative agreement is contingent, to permit appropriate direction and redirection of activities.

2. Reviewing and approving all contracts and agreements among recipient and medical or osteopathic schools, other health professions schools and community-based centers.

3. Participating with project staff in the development of funding projections.

4. Developing with project staff individual project data collection systems and procedures.

5. Participating with project staff in the design of project evaluation protocols and methodologies.

Other Considerations

Applicants in States where more than one eligible entity exists are encouraged to collaborate in the submission of a single application, which reflects a consortium of Statewide programs to coordinate community-based health professions training activities.

The principal objective of this new legislation is to encourage State coordination and support for AHEC activities. The most effective approach for obtaining support from State legislatures is to present a unified plan showing how all the programs are working together to provide the needed services in the State. Competitive applications from one State tends to be devisive rather than unifying in reaching common goals.

Final Criteria for Allocation of Available Funds

Proposed criteria for allocation of available funds was published in the Federal Register on June 8, 1993, 58 FR 32150 for public comment. No comments were received during the 30-day comment period. Therefore, as proposed, the final criteria for allocation of available funds will be retained as follows:

As a condition of receiving funding:

(1) Applicants will be required to meet the eligibility conditions of programs as set forth in section 746(b), and the AHEC centers they wish to have included must meet eligibility requirements in accordance with section 746(d);

(2) The State contribution to the AHEC program(s) in the current year is at least equal to the amount to be received from the Federal program as required by section 746(a)(3)(B); and

(3) The program activities for which support is requested are determined by peer reviewers to be qualitatively acceptable.

Programs that submit acceptable applications, in accordance with the above criteria, will receive funding based on the following allocation of funds:

1. The total amount available for funding under section 746(a)(3) will be divided by the total number of qualifying AHEC centers in approved applications. This will yield the per center allocation. The coordinating AHEC applicant for each State will receive an amount equal to the number of qualifying centers in the approved application times the per center allocation.

2. In accordance with the provisions of section 746(e)(l)(A), the award will clearly indicate that 75 percent of the awarded funds are to be spent in approved centers. The remaining 25 percent can be allocated to the AHEC program office and/or other participating schools.

The State matching provision was included in this new legislation to promote State funding. The allocation of Federal funds to all qualifying AHEC programs is intended to provide as broad as possible a base for the accomplishment of this purpose. The number of qualifying AHEC centers is used as the means for distribution of funds because the statute requires that 3/4 of funds are designated to go to these entities.

Questions regarding programmatic information should be directed to: Ms. Cherry Tsutsumida, Chief, AHEC and Special Programs Branch, Division of Medicine, Bureau of Health Professions, HRSA, Parklawn Building, room 4C–03, 5600 Fishers Lane, Rockville, Maryland 20857, Telephone: (301) 443–6950.

This program is listed at 93.107 in the Catalog of Federal Domestic Assistance. It is not subject to the provisions of Executive Order 12372, Intergovernmental Review of Federal Programs (as implemented through 45 CFR part 100).

This program is not subject to the Public Health System Reporting Requirements.

Dated: September 8, 1993.

William A. Robinson,

Acting Administrator.

[FR Doc. 93–22407 Filed 9–13–93; 8:45 am]

BILLING CODE 4160–15–P

National Institutes of Health

Opportunity for a Cooperative Research and Development Agreement (CRADA) for the Biomedical Use of Adenosine Derivatives

AGENCY: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, PHS, DHHS.

ACTION: Notice.

SUMMARY: The Department of Health and Human Services (DHHS) seeks an agreement with a pharmaceutical or biotechnology company for the joint research, development, evaluation and possible commercialization of agonists and antagonists of adenosine-A_1 and adenosine-A_2 receptors and other subtypes of purine receptors.

ADDRESSES: Proposals and questions about this opportunity may be addressed to Dr. C. R. Creveling, Office of Technology Development, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Building 8A, room 1A–27, Bethesda, MD 20892 (301–496–5360; FAX 301–402–0008).

DATES: Proposals must be received by November 29th, 1993.

SUPPLEMENTARY INFORMATION: Purinoceptor pharmacology is a rapidly expanding area mainly focused upon the potential therapeutic aspects of agonists and antagonists of adenosine receptors. Adenosine derivatives have been implicated as effective agents for hypertension; pain control; selective cognition-enhancing activity; antiasthmatic activity; cystic fibrosis; treatment of CNS disorders (Parkinson's and Huntington's diseases, epilepsy); stroke protection; kidney protection; the treatment of cardiovascular disease; and modulation of immunological responses. Current research is directed towards the development of adenosine derivatives with selective actions *in vivo* and developing therapeutic potential of an increasing number of adenosine and ATP receptor subtypes.

CRADA aims include the rapid publication of research results and the timely exploitation of commercial opportunities. The CRADA partner will enjoy rights of first negotiation for licensing Government rights to any subject inventions arising under the agreement and will advance funds payable upon signing the CRADA to help defray Government expenses for patenting such invention and other CRADA-related costs.

The role of the Laboratory of Bioorganic Chemistry, NIDDK, in this CRADA will be as follows:

1. Provide the Collaborator with samples of the subject compounds for pharmaceutical evaluation.

2. Synthesize structural variants of the subject compounds to optimize the desired effects.

3. Continue the detailed physicochemical characterization of the test compounds as well as research on the mechanism of biological action. Publish these results and provide all data to the Collaborator as soon as they become available.

The role of the Collaborator will be to perform a reasonably comprehensive evaluation of the adenosine derivatives with respect to the biological activities covered in the CRADA. The collaborator

will supply data to the NIDDK in a timely fashion.

Selection criteria for choosing the CRADA partner will include but not be limited to:

1. Ability to complete quality pharmacological evaluation required according to an appropriate timetable to be outlined in the Collaborators's proposal. The target commercial application as well as the strategy for evaluation of the test agents' potential in that capacity must be clearly delineated therein.

2. The level of financial support the collaborator will supply for CRADA-related activities.

3. A willingness to cooperate with the NIDDK in the publication of research results.

4. An agreement to be bound by the DHHS rules involving human subjects, patent rights and ethical treatment of animals.

5. Agreement regarding provisions for equitable distribution of patent rights to any subject invention arising under the CRADA. Generally, the rights of ownership are retained by the organization which is the employee of the inventor, with (1) an irrevocable, nonexclusive, royalty-free license to the Government (when a company employee is the sole inventor) or (2) an exclusive or nonexclusive license to the company on terms that are appropriate (when the Government employee is the sole or joint inventor).

The following is a listing of Dr. Kenneth Jacobson's patent portfolio. Each of the listed inventions is available for licensing and/or further development under a CRADA:

Adenosine-Related Inventions

(1) Jacobson, K.A., Daly, J.W., and Kirk, K.L., "Biologically-Active 1,3,-Dipropyl-8-Phenylxanthine Derivatives," U.S. Appl. 06/664,953, filing date 10/26/84.
Status: U.S. Patent No. 4,612,315—Issued 9/16/86. Eur. Pat. Appl. EP 85905958.6.

(2) Jacobson, K.A., Daly, J.W., and Kirk, K.L., "Biologically-Active Xanthine Derivatives," U.S. Appl. 06/717,616, filing date 3/29/85.
Status: U.S. Patent No. 4,696,932—Issued 9/29/87.

(3) Jacobson, K.A., Daly, J.W., and Kirk, K.L., "Adenosine Receptor Prodrugs," U.S. Appl. 07/000,229, filing date 1/2/87.
Status: U.S. Patent No. 4,968,672—Issued 11/6/90.

(4) Jacobson, K.A. and Stiles, G.L., "Irreversible Inhibitors of Adenosine Receptors," U.S. Appl. 07/837,105 (FWC of 07/221,413) filing date 2/18/92.
Status: Allowed.

(5) Jacobson, K.A., Kirk, K.L., and Daly, J.W., "Molecular Probes for Adenosine Receptors," U.S. Appl. 07/287,539, filing date 12/19/88.
Status: Allowed.

(6) Jacobson, K.A., Pfleiderer, W., Daly, J.W., and Neumeyer, J.L., "Sulfur-Containing Xanthine Derivatives as Adenosine Antagonists," U.S. Appl. 07/340,351, filing date 4/19/89.
Status: Appealed.

(7) Jacobson, K.A., Kirk, K.L., and Daly, J.W., "Adenosine Functionalized Congeners as Cardiovascular Treating Agents," U.S. Appl. 07/924,792 (FWC of 07/346,257), filing date 8/6/92.
Status: Allowed.

(8) Jacobson, K.A., Stiles, G.L., and Boring, D.L., "Preparation of Xanthine Derivatives as Irreversible Inhibitors of A_1-Adenosine Receptors," U.S. Appl. 07/572,410, filing date 8/24/90.
Status: Pending.

(9) Jacobson, K.A., McCabe, T., and Skolnick, P., "Preparation, Pharmaceutical Compositions, and Methods of Use of Adenosine A_2 Receptor Agonists for Adenosine A_2 Receptor Probes and for Therapeutic Agents," U.S. Appl. 07/577,528, filing date 9/5/90.
Status: Allowed.

(10) Jacobson, K.A., and Maillard, M., "Sulfo-Derivatives of Adenosine," U.S. Appl. 07/914,428, filing date 7/15/92.
Status: Pending.

(11) Pollard, H., Jacobson, K., Cabantchik, I., and van Galen, P., "Adenosine Antagonists To Treat Cystic Fibrosis and Related Diseases," U.S. Appl. 07/952,965, Filing date 9/29/92.
Status: Pending.

(12) Jacobson, K.A., Karton, Y., Gallo-Rodriguez, C., Fischer, B., van Galen, P., and Maillard, M., "8-Substituted-1,3,7-Trialkylxanthine Derivatives," U.S. Appl. 08/057,086, filing date 5/3/93.
Status: Pending.

(13) van Galen, P., Jacobson, K.A., and Gallo-Rodriguez, C., "A_3 Adenosine Receptor Agonists and Antagonists," U.S. Appl. 08/091,109, filing date 7/13/93.
Status: Pending.

Non-Adenosine-Related Inventions

(1) Jacobson, K.A., Linnoila, M., Mine, K., Miller, T., and Kirk, K.L., "Derivatization of Amines for Electrochemical Detection," U.S. Appl. 07/290,279, filing date 12/27/88.
Status: U.S. 4,908,322—Issued 3/12/90.

(2) Jacobson, K.A., Kirk, K.L., Furlano, D., and Shai, Y., "Process for Introducing Fluorine Into Biologically Active Material," U.S. Appl. 07/168,494, filing date 3/15/88.
Status: U.S. Patent No. 5,098,996—Issued 3/24/92.

(3) Jacobson, K.A., Bradbury, B.J., and Baumgold, J., "Novel Muscarinic Agents," U.S. Appl. 07/876,917 (FWC of 7/310,954), filing date 4/30/92.
Status: Allowed.

(4) Jacobson, K.A., Bradbury, B.J., and Karton, Y., "Muscarinic Antagonists," U.S. Appl. 07/725,066, filing date 7/3/91.
Status: Allowed.

Dated: September 1, 1993.

Reid G. Adler,

Director, Office of Technology Transfer.

[FR Doc. 93–22414 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

The inventions listed below are owned by agencies of the U.S. Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious commercialization of results of federally funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for U.S. companies and may also be available for licensing.

ADDRESSES: Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated Licensing Specialist at the Office of Technology Transfer, National Institutes of Health, Box OTT, Bethesda, Maryland 20892 (telephone 301/496–7735; fax 301/402–0220). A signed Confidentiality Agreement will be required to receive copies of the patent applications. Issued patents may be obtained from the Commissioner of Patents, U.S. Patent and Trademark Office, Washington, DC 20231.

07/269,407 Construction of Non-Infectious Retroviral Mutants Deficient in Viral RNA. Licensing Specialist: Steven M. Ferguson.

07/623,690 Method of Treating Ocular Inflammatory Diseases. Licensing Specialist: Marjorie D. Hunter.

08/030,843 Redirected Targeting Through the Use of 2 or More Targeting Agents Having a Self-Associating Property. Licensing Specialist: Marjorie D. Hunter.
08/037,578 Calpain Inhibitors to Treat Programmed Cell Death. Licensing Specialist: Steven M. Ferguson.
08/037,633 Suppression of HIV Expression by Organic Thiophosphate. Licensing Specialist: Steven M. Ferguson.
08/061,889 Von Hippel-Lindau Disease Gene and Corresponding cDNA. Licensing Specialist: Marjorie D. Hunter.
08/063,315 Immunologic Enhancement in HIV-Infected Patients with Intermittent Interleukin-2 Therapy. Licensing Specialist: Steven M. Ferguson.
08/065,814 New Procedure to Block the Replication of Reverse Transcriptase Dependent Viruses by the Use of Inhibitors of Deoxynucleotide Synthesis. Licensing Specialist: Steven M. Ferguson.
08/085,994 Means to Provide Improved Seating for an Endotracheal Tube Including the Use of Nitinol Alloys for Crush Resistance. Licensing Specialist: John Fahner-Viitelic.

Dated: September 7, 1993.

Reid G. Adler,

Director, Office of Technology Transfer.

[FR Doc. 93–22413 Filed 9–13–93; 8:45 am]

BILLING CODE [illegible]

National Institute of Allergy and Infectious Diseases; Meeting: Microbiology and Infectious Diseases Research Committee

Pursuant to Public Law 92–463, notice is hereby given of the meeting of the Microbiology and Infectious Diseases Research Committee, National Institute of Allergy and Infectious Diseases, on October 7–8, 1993, at the Bethesda Ramada Inn, Room Ambassador I, 8400 Wisconsin Avenue, Bethesda, Maryland 20815.

The meeting will be open to the public from 8 a.m. to 9 a.m. on October 7, to discuss administrative details relating to committee business and for program review. Attendance by the public will be limited to space available. In accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C. and section 10(d) of Public Law 92–463, the meeting will be closed to the public for the review, discussion, and evaluation of individual grant applications and contract proposals from 9 a.m. until recess on October 7, and from 9 a.m. until adjournment on October 8. These applications, proposals and the discussions could reveal confidential trade secrets or commercial property such as patentable material and personal information concerning individuals associated with the applications and proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Ms. Claudia Goad, Committee Management Officer, National Institute of Allergy and Infectious Diseases, Solar Building, room 3C26, National Institutes of Health, Bethesda, Maryland 20892, 301–496–7601, will provide a summary of the meeting and a roster of committee members upon request. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should contact Ms. Goad in advance of the meeting.

Dr. Peter R. Jackson, Scientific Review Administrator, Microbiology and Infectious Diseases Research Committee, NIAID, NIH, Solar Building, room 4C13, Rockville, Maryland 20892, telephone 301–496–8426, will provide substantive program information.

(Catalog of Federal Domestic Assistance Program No. 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health)

Dated: September 7, 1993.

Susan K. Feldman,

Committee Management Officer, NIH.

[FR Doc. 93–22417 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

National Institute of Allergy and Infectious Diseases; Meeting: Allergy, Immunology, and Transplantation Research Committee

Pursuant to Public Law 92–463, notice is hereby given of the meeting of the Allergy, Immunology, and Transplantation Research Committee on October 13–14, 1993, at the Ramada Inn, 8400 Wisconsin Avenue, Bethesda, Maryland 20892.

The meeting will be open to the public from 8:30 a.m. to 9:45 a.m. on October 13, to discuss administration details relating to committee business and for program review. Attendance by the public will be limited to space available. In accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C. and section 10(d) of Public Law 92–463, the meeting will be closed to the public for the review, discussion, and evaluation of individual grant applications and contract proposals from 9:45 a.m. until recess on October 13 and from 8:30 a.m. until adjournment on October 14. These applications, proposals, and the discussions could reveal confidential trade secrets or commercial property such as patentable material and personal information concerning individuals associated with the applications and proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Ms. Claudia Goad, Committee Management Officer, National Institute of Allergy and Infectious Diseases, Solar Building, room 3C26, National Institutes of Health, Bethesda, Maryland 20892, 301–496–7601, will provide a summary of the meeting and a roster of committee members upon request. Individuals who plan to attend and need special assistance, such as sign language interpretation or other reasonable accommodations, should contact Ms. Goad in advance of the meeting.

Dr. Mark L. Rohrbaugh, Scientific Review Administrator, Allergy, Immunology and Transportation Research Committee, NIAID, NIH, Solar Building, room 4C22, Bethesda, Maryland 20892, telephone 301–496–8424, will provide substantive program information.

(Catalog of Federal Domestic Assistance Program Nos. 93.855, Immunology, Allergic and Immunologic Diseases Research, National Institutes of Health.)

Dated: September 7, 1993.

Susan K. Feldman,

Committee Management Officer, NIH.

[FR Doc. 93–22418 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

National Cancer Institute; Meeting of the Cancer Research Manpower Review Committee

Pursuant to Public Law 92–463, notice is hereby given of the meeting of the Cancer Research Manpower Review Committee, National Cancer Institute, on October 13–15, 1993, The Saint James Hotel, 950 24th Street, NW., Washington, DC 20037.

This meeting will be open to the public on October 13, 1993, from 7:30 p.m. to 8 p.m., to review administrative details and other cancer research manpower review issues. Attendance by the public will be limited to space available.

In accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C. and section 10(d) of Public Law 92–463, the meeting will be closed to the public on October 14 from 8 a.m. to recess and on October 15 from 8 a.m. to adjournment for the review, discussion, and evaluation of individual grant applications. These applications and the discussions could reveal confidential trade secrets or commercial property such as patentable material and personal information concerning individuals associated with the applications the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

The Committee Management Officer, National Cancer Institute, Executive Plaza North, room 630E, National Institutes of Health, Bethesda, Maryland 20892 (301/496–5708) will provide summaries of the meeting and rosters of committee members upon request.

Dr. Mary Bell, Scientific Review Administrator, Cancer Research Manpower Review Committee, National Cancer Institute, Executive Plaza North, room 611A, National Institutes of Health, Bethesda, Maryland 20892 (301/496–7978) will furnish substantive program information.

Individuals who plan to attend and need special assistance, such as sign

language interpretation or other reasonable accommodations, should contact Dr. Mary Bell, (301) 496–7978 in advance of the meeting.

(Catalog of Federal Domestic Assistance Program Number: 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer Treatment Research; 93.396, Cancer Biology Research; 93.397, Cancer Centers Support; 93.398, Cancer Research Manpower; 93.399, Cancer Control.)

Dated: September 7, 1993.

Susan K. Feldman,

Committee Management Officer, NIH.

[FR Doc. 93–22416 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

National Institutes of Health, National Cancer Institute; Meeting of the Biometry and Epidemiology Contract Review Committee

Pursuant to Public Law 92–463, notice is hereby given of the meeting of the Biometry and Epidemiology Contract Review Committee, National Cancer Institute, National Institutes of Health, on November 1, 1993, at the Executive Plaza North Building, Conference Room G, 6130 Executive Boulevard, Rockville, Maryland 20852.

This meeting will be open to the public from 9 a.m. to 10 a.m. to discuss administrative details. Attendance by the public will be limited to space available.

In accordance with provisions set forth in secs. 552b(c)(4) and 552b(c)(6), Title 5, U.S.C. and section 10(d) of Public Law 92–463, the meeting will be closed to the public on November 1 from 10 a.m. to adjournment for the review, discussion, and evaluation of individual contract proposals. These proposals and the discussions could reveal confidential trade secrets or commercial property such as patentable material and personal information concerning individuals associated with the proposals, disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

The Committee Management Officer, National Cancer Institute, Executive Plaza North, room 630, National Institutes of Health, Bethesda, Maryland 20892–9903, Tel. 301/496–5708, will provide a summary of the meeting and a roster of the committee members upon request.

Dr. Harvey P. Stein, Scientific Review Administrator, Contracts Review Branch, Division of Extramural Activities, National Cancer Institute, National Institutes of Health, Executive Plaza North, room 601C, Bethesda, Maryland 20892–9903, Tel. 301/496–7030, will furnish substantive program information.

Individuals who plan to attend and need special assistance such as sign language interpretation or other reasonable accommodations should contact Ms. Alma O. Carter on (301) 496–7523 in advance of the meeting.

(Catalog of Federal Domestic Assistance Program Numbers: 93.393, Cancer Cause and Prevention Research; 93.394, Cancer Detection and Diagnosis Research; 93.395, Cancer Treatment Research; 93.396, Cancer Biology Research; 93.397, Cancer Centers Support; 93.398, Cancer Research Manpower; 93.399, Cancer Control.)

Dated: September 7, 1993.

Susan K. Feldman,

Committee Management Officer, NIH.

[FR Doc. 93–22420 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

National Institutes on Deafness and Other Communication Disorders; Meeting of the Communication Disorders Review Committee

Pursuant to Public Law 92–463, notice is hereby given of a meeting of the Communication Disorders Review Committee on October 20–22, 1993. The Committee will meet at the Hyatt Regency-Bethesda, One Bethesda Metro Center, Bethesda, Maryland 20814. Notice of the meeting room will be posted in the hotel lobby.

The Committee meeting will be open to the public on October 20 from 8 a.m. until approximately 8:30 a.m. to discuss administrative details relating to Committee business. Attendance by the public will be limited to space available.

The meeting of the Committee will be closed to the public from approximately 8:30 a.m. October 20 until adjournment on October 22 in accordance with provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C. and section 10(d) of Public Law 92–463, for the review, discussion, and evaluation of individual grant applications. These deliberations could reveal confidential trade secrets or commercial property, such as patentable material, and personal information concerning individuals associated with the applications, disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Further information concerning the Committee meeting may be obtained from Dr. Craig A. Jordan, Scientific Review Administrator, National Institute on Deafness and Other Communication Disorders, room 400B Executive Plaza South, Bethesda, Maryland 20892, 301–496–8683. For individuals who plan to attend and need special assistance such as sign language interpretation or other reasonable accommodations, please contact Dr. Jordan two weeks prior to the meeting.

(Catalog of Federal Domestic Assistance Program No. 93.173 Biological Research Related to Deafness and Other Communication Disorders)

Dated: September 7, 1993.

Susan K. Feldman,

Committee Management Officer, NIH.

[FR Doc. 93–22419 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

Prospective Grant of an Exclusive License

AGENCY: National Institutes of Health, Public Health Service, DHHS.

ACTION: Notice.

SUMMARY: This is notice in accordance with 35 U.S.C. 209(c)(1) and 37 CFR 404.7(a)(1)(i) that the National Institutes of Health (NIH), Department of Health and Human Services, is contemplating the grant of an exclusive license to practice the inventions embodied in USPA numbers: (1) 07/758,824, entitled, "Apparatus For And Method Of Making Ultra-Thin Walled And Wire-Reinforced Endotracheal Tubing"; (2) 07/878,784, entitled, "Sealing Means for Endotracheal Tubes"; and (3) 08/085/994, entitled "Means To Provide Improved Seating For An Endotracheal Tube Including The Use of Nitinol Alloys For Crush Resistance."

The patient rights in these inventions have been assigned to the United States of America.

The prospective license will be royalty-bearing and will comply with the terms and conditions of 35 U.S.C. 209 and 37 CFR 404.7. The prospective exclusive license may be granted unless, within sixty (60) days from the date of this published notice, NIH receives written evidence and argument that establishes that the grant of the exclusive license would not be consistent with the requirements of 35 U.S.C. 209 and 37 CFR 404.7.

These inventions relate to apparatus for and methods of producing endotracheal tubing. Also covered by the prospective license is a device and method of sealing endotracheal tubes while in use. This technology provides a seal between the trachea and the tube which allows for a maximum amount of fresh air to be delivered to the patient.

ADDRESSES: Requests for a copy of the subject patent applications, inquiries, and comments relating to the contemplated license should be directed

to: John E. Fahner-Vihtelic, Office of Technology Transfer, National Institutes of Health, Box OTT, Bethesda, MD 20892 (telephone 301/496–7735; fax 301/402–0220). Properly filed competing applications for a license filed in response to this notice will be treated as objections to the grant of the contemplated license. Only written comments and/or applications for a license which are received by the Office of Technology Transfer, NIH, within sixty (60) days of this notice will be considered.

Dated: August 12, 1993.

Reid G. Adler,

Director, Office of Technology Transfer.

[FR Doc. 93–22415 Filed 9–13–93; 8:45 am]

BILLING CODE 4140–01–M

Office of Inspector General

Program Exclusions: August 1993

AGENCY: Office of Inspector General, HHS.

ACTION: Notice of program exclusions.

During the month of August 1993, the HHS Office of Inspector General imposed exclusions in the cases set forth below. When an exclusion is imposed, no program payment is made to anyone for any items or services (other than an emergency item or service not provided in a hospital emergency room) furnished, ordered or prescribed by an excluded party under the Medicare, Medicaid, Maternal and Child Health Services Block Grant and Block Grants to States for Social Services programs. In addition, no program payment is made to any business or facility, e.g., a hospital, that submits bills for payment for items or services provided by an excluded party. Program beneficiaries remain free to decide for themselves whether they will continue to use the services of an excluded party even though no program payments will be made for items and services provided by that excluded party. The exclusions have national effect and also apply to all other Federal non-procurement programs.

Subject, city, state	Effective date
Program-Related Convictions:	
Adams, Gary L., Baton Rouge, LA	08/26/93
Ansari, Inamul H, Detroit, MI	08/29/93
Bockrath, Eugene T, Colorado Springs, CO	09/13/93
Boudreaux, Lois Adams, Melville, LA	08/26/93
Clinical Regional Lab Inc, Hazelcrest, IL	09/13/93
Moore, Wesley D, Clinton, NC	09/13/93
Morales, Nelson, Flushing, NY	08/29/93
Pages, Ana Garcia, Coral Gables, FL	09/02/93
Pearce, William John, Mt Pleasant, SC	09/02/93
Smith, Lance C, Gaithersburg, MD	09/15/93
Stillwagon, Linda G, Seymour, CT	09/14/93
Woodman, Jack S, Dayton, OH	08/29/93
Patient Abuse/Neglect Convictions:	
Boudreaux, Peggy Marie, Harvey, LA	08/26/93
Bowser-Buford, Michelle, Mt Morris, MI	08/29/93
Carson, Tawana M, Muskegon Hgts, MI	08/29/93
Dirrell, Sid Carrold, Flint, MI	09/13/93
Gowen, Burma J, Scottville, MI	08/29/93
Hart, Ralph Lee, Odenville, AL	09/15/93
Harvell, Thomas, Corinth, MS	09/15/93
Henry, Beckie Marie, Alexandria, LA	08/26/93
Hersey, Letha, Shannon, MS	09/15/93
Koo, Young Soo, Hammond, IN	08/29/93
Lawler, William C, Baltimore, MD	08/29/93
Madison, Mary Ella, Montgomery, AL	09/02/93
McCall, Melvin, Tuscaloosa, AL	09/15/93
McDonald, Roxanne, Gerrardstown, WV	08/29/93
Michael, Lana, Baldwin, MS	09/15/93
Schulz, Randy Noel, Andover, MN	09/13/93
Washington, Jackie, Birmingham, AL	09/15/93
Controlled Substance Convictions:	
Rodriquez, Roniel III, Hialeah, FL	09/15/93
Entities Owned/Controlled by Convicted:	
American Medical Transport, Baton Rouge, LA	08/26/93
Nathan's Pharmacy, W Palm Beach, FL	09/02/93
Default on Heal Loan:	
Ash/Slayter, Carolyn M, San Diego, CA	09/23/93
Bledsoe, Ralph C, Carson, CA	09/23/93
Braxton-Davis, Pamela M, San Gabriel, CA	09/05/93
Bronk, Brian R, Santa Monica, CA	09/05/93
Brown, James E, East Orange, NJ	09/08/93
Burns-Toole, Peggy L, Houston, TX	09/05/93
Cody, Ronald J, Valley Center, KS	09/08/93
Collins, Henry L, Chicago, IL	09/08/93
Collins, Norman E, Renton, WA	09/15/93
Dancer, Gena A, Trumbull, CT	09/12/93
Davis, Keith A, Chicago, IL	09/08/93
Garcia, Roger, Columbus, Oh	09/23/93
Gonzales, Edward J, Los Angeles, CA	09/05/93
Gross, Dale M, Canoga Park, CA	09/05/93
Hofner, Mark, Dearborn Hgts, MI	09/08/93
Hughes, Charles E Jr, Baltimore, MD	09/08/93
Kane, Richard A, Somerset, NJ	09/08/93
Karnes, Ronald D, Haysville, KS	09/08/93
Kendrick, John Charles, Beaverton, OR	09/23/93
King, James Ray, Fort Myers, FL	09/12/93
Kogut, Dennis W, Miami, FL	09/12/93
Langham, Mary L, Chugiak, AK	09/12/93
Matthews, Paul E, Fort Worth, TX	09/05/93
McGregory, Scott Duncan, Carrollton, TX	09/02/93
Meininger, Kathryn L, Collingswood, NJ	09/08/93
Nuhfer, Dina L Dempsey, Erie, PA	09/23/93
Rosenthal, Neil D, Colonie, NY	09/08/93
Silverstein, Michael A, New York, NY	09/08/93
Peer Review Organization Case:	
Nelson, Karl, Princeton, IL	08/19/93

* * * * *

Dated: September 7, 1993.

James F. Patton,

Director, Health Care Administrative Sanctions, Office of Investigations

[FR Doc. 93–22364 Filed 9–13–93; 8:45 am]

BILLING CODE 4150–04–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[OR–920–4140–02–GEOT; GP3–383; OR 12765]

Addition to the Newberry Caldera Known Geothermal Resource Area, Oregon

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of addition to the Newberry Caldera Known Geothermal Resource Area, Oregon.

SUMMARY: Pursuant to the authority vested in the Secretary of the Interior by Section 21(a) of the Geothermal Steam Act of 1970 (84 Stat. 1566, 1572; 30 U.S.C. 1020), the delegations of authority in 235 Departmental Manual 1.1 K & L, to the Bureau of Land Management, the following lands are hereby added to the Newberry Caldera Known Geothermal Resource Area.

EFFECTIVE DATE: September 15, 1993.

FOR FURTHER INFORMATION CONTACT: Jack Feuer, Bureau of Land Management, Oregon State Office, Division of Mineral Resources, 1300 NE 44th Avenue, P.O. Box 2965, Portland, Oregon 97208–2965, (503) 280–7043.

Newberry Caldera Known Geothermal Resource Area

Willamette Meridian, Oregon

T. 21 S., R. 13 E.,
Secs. 7, 8, and 9
T. 22 S., R. 13 E.,
Secs. 18
T. 21 S., R. 12 E.,
Secs. 9, 10, 12, 16, 17, 20, and 29 through 32
T. 22 S., R. 12 E.,
Secs. 5, 6, 8, and 13 through 16

The above area aggregates 13,344.68 acres more or less

Dated: September 2, 1993.

Patrick H. Geehan,

Deputy State Director for Mineral Resources.

[FR Doc. 93–22378 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-33-M

[UT–942–4210–05; UTU–65091]

Correction of Previous FR Notice; Goshute Indian Reservation; Utah

AGENCY: Bureau of Land Management, Interior.

ACTION: Correction.

SUMMARY: The notice published in 54 FR 19245, dated May 4, 1989 is corrected in its entirety by this notice. Public Law 100–708 (102 Stat. 4717) corrected historical and geographical oversights in the establishment and development of the Goshute Indian Reservation in Utah. Because of several errors in the original FR notice, this notice is being published.

FOR FURTHER INFORMATION CONTACT: For further information contact Randy Massey, Utah State Office, Bureau of Land Management, P.O. Box 45155, Salt Lake City, Utah 84145–0155.

SUPPLEMENTARY INFORMATION: Public Law 100–708 (102 Stat. 4717), dated November 23, 1988, corrected historical and geographical oversights in the establishment and development of the Utah component of the Confederated Tribes of the Goshute Reservation, unified the land base of the Goshute Reservation, and simplified the boundaries of the Reservation. The lands in Utah in Executive Order 1539, dated May 29, 1912, and Executive Order 1903, dated March 23, 1914, are declared to be held in trust. The following described lands, and interest in lands, in Utah are hereby added to the Reservation and declared to be held in trust by the United States for the use and benefit of the Goshute Indian Tribe.

Salt Lake Meridian

1. The following described lands are held in fee (surface and subsurface):

T. 10 S., R. 19 W.,
Sec. 4, lots 3 and 4, SW¼NW¼, E½SE¼NW¼, NW¼SE¼NW¼, N½SW¼SE¼NW¼, SW¼;
Sec. 9, NW¼NW¼.
T. 11 S., R. 20 W.,
Sec. 1,
Sec. 12, lots 1–4, NE¼, NE¼SE¼;
Sec. 13, lots 1–4, W½SE¼, SE¼SE¼;
Sec. 24;
Sec. 25.
T. 12 S., R. 20 W.,
Sec. 1;
Sec. 12, lots 1 and 2.

2. The surface only of the following described lands is held in trust:

T. 9 S., R. 19 W.,
Sec. 22, SE¼SW¼;
Sec. 27, E½W½;
Sec. 33, SE¼NE¼, SE¼SW¼, SE¼;
Sec. 34, NW¼, NE¼SW¼, W½SW¼.
T. 10 S., R. 19 W.,
Sec. 3, lot 4, SW¼NW¼;
Sec. 4, lots 1 and 2, S½NE¼, SE¼;
Sec. 9, NE¼NW¼, S½NW¼, N½S½.
T. 11 S., R. 19 W.,
Sec. 8, SE¼SE¼;
Sec. 9, SW¼SW¼;
Sec. 19, NE¼SW¼;
Sec. 20, E½W½;
Sec. 22.
T. 12 S., R. 19 W.,
Sec. 27, NW¼NW¼, S½NW¼, SW¼;
Sec. 28;
Sec. 29, E½;
Sec. 30, lot 1, NE¼, NE¼NW¼;
Sec. 33, NE¼, NE¼NW¼;
Sec. 34;
Sec. 35, NW¼SW¼.
T. 12 S., R. 20 W.,
Sec. 12, lots 3 and 4;
Sec. 13, lots 1–4;
Sec. 24, lots 1–4.

3. The subsurface of the following described land is held in trust:

T. 9 S., R. 19 W.,
Sec. 22, SE¼SW¼ (oil and gas).
T. 10 S., R. 19 W.,
Sec. 4, S½SW¼SE¼NW¼ (oil and gas).
T. 12 S., R. 19 W.,
Sec. 28, N½NW¼, SE¼NW¼ (all minerals);
Sec. 29, NE¼NE¼, W½E½, E½SE¼ (all minerals);
Sec. 30, S½NE¼ (all minerals).
T. 12 S., R. 20 W.,
Sec. 12, lots 3 and 4 (all minerals);
Sec. 13, (all minerals);
Sec. 24, (all minerals).

4. The Secretary of the Interior may accept a conveyance by the Tribe of all right, title, and interest of the Tribe in and to the lands described below and any such lands accepted by the Secretary shall be held by the United States in trust for use and benefit of the Tribe and shall become part of the Reservation: (lands held by the Tribe as a private party)

T. 10 S., R. 19 W.,
Sec. 4, S½SW¼SW¼NW¼.

A map depicting the lands added to the Reservation is on file and available for public inspection in the Eastern Nevada Agency Office, Bureau of Indian Affairs, 1555 Shoshone Circle, Elko, Nevada 89801.

JoAn Robbins,

Acting Chief, Branch of Lands and Minerals Operations.

[FR Doc. 93–22405 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-DQ-M

[WY–031–4210–05; WYW 129881]

Request for Sale of Public Lands in Fremont County, WY; Realty Actions

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of realty action; request for sale of public lands in Fremont County, Wyoming.

SUMMARY: The Bureau of Land Management (BLM) has received a request from the Great Buffalo Herd Monument Foundation (Foundation) to purchase 367.42 acres of public land that is located about 30 miles southeast of Lander and about 6 miles northwest of Sweetwater Station near Beaver Rim. This notice segregates the proposed parcel from appropriation under the public land laws, including the mining laws, and provides notice to the public and to current land users in accordance with existing regulations.

This notice does not constitute endorsement or approval by the BLM. Rather, it provides time for the Foundation to provide all the required information for their proposal; allows time for the public to comment; and time for the BLM to do an environmental analysis of the proposal. It will also be used to determine whether or not an Environmental Impact Statement (EIS) is necessary for the requested sale of the public land.

The next public comment period would follow the environmental analysis but precede the decision on whether or not the public land should be sold as requested by the Foundation.

The proposal consists of purchase by the Foundation of the surface and mineral estates, pursuant to sections 203 and 209 of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1713 and 1719; and the regulations at 43 CFR 2710 and 2720.

The parcel is described as:

Sixth Principal Meridian

T. 31 N., R. 95 W.,
Sec. 31: Lots 1, 2, and 3, W1/2NE¼, E½NW¼, NE¼SW¼, NW¼SE¼.

The above lands aggregate 367.42 acres.

The Foundation proposal is for acquisition of this parcel to establish the Great Buffalo Herd Monument, consisting of 1,000 metal buffalo sculptures. Associated visitor facilities such as a visitor information center are not proposed for public lands administered by the BLM, but have been proposed on adjacent State of Wyoming lands.

If sold, the sale would be at fair market value as determined by appraisal. An additional nonrefundable application fee of $50.00 would be required in accordance with 43 part 2720 for conveyance of all unreserved mineral interest in the parcel.

Final determination of suitability for disposal will be made through the environmental analysis process pursuant to the National Environmental Policy Act of 1969, as amended and the Federal Land Policy and Management Act (FLPMA). The environmental assessment and/or environmental impact statement will be made available for review and subsequent public comment prior to a final decision. The proposal will also be reviewed to determine conformance with the Lander Resource Management Plan.

Conveyance would be subject to the following:

1. Reservation of a right-of-way for ditches or canals pursuant to the Act of August 30, 1890, 43 U.S.C. 945.

2. Possible reservation of oil and gas interests to the United States with the right to prospect, explore, and develop the same in accordance with the provision of the federal mineral laws in effect at the time of disposal. Determination of whether this reservation will be effected will occur after a mineral analysis and report are accomplished, if the public benefit decision and evironmental assessment lead to a final decision to transfer the land.

4. BLM oil and gas lease, serial number WYW 123480.

5. Any other valid existing rights, unknown at present, that are identified during the environmental assessment process.

The public lands involved are within the Dishpan Butte Allotment No. 1716. The grazing permittees are D.T. Abernathy and Philip Sheep Company. These permittee's will be sent a 2-year notice, as required by 43 CFR 4110.4–2(b), prior to cancellation of a portion of the grazing permits. The grazing privileges would not be cancelled if the lands are not sold.

The public land parcel described above shall be segregated from all forms of appropriation under the public land laws, including the mining laws, upon publication of this notice in the **Federal Register**. The segregative effect will end 270 days from the date of publication, upon issuance of a patent, or upon publication in the **Federal Register** of a termination of the segregation, whichever occurs first.

FOR FURTHER INFORMATION CONTACT: Jack Kelly, Area Manager, Lander Resource Area, 125 Sunflower, P.O. Box 589, Lander, Wyoming 82520, (307) 332–7822.

SUPPLEMENTARY INFORMATION: For a period of forty five (45) days from the date of publication of this notice, interested parties may submit comments to the Area Manager, Bureau of Land Management, Lander Resource Area, P.O. Box 589, Lander, Wyoming 82520. All comments will be retained and evaluated by the BLM Wyoming State Director who may sustain, vacate, or modify this proposed realty action.

Dated: September 7, 1993.

Jack Kelly,

Area Manager.

[FR Doc. 93–22368 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-22-M

[G–910–G3–0065–4210–04; NMNM 90022]

Farmington District; Realty Action—Exchange; New Mexico

AGENCY: Bureau of Land Management, Farmington District, Interior.

ACTION: Notice of realty action, NM90022. Exchange of public and private lands in McKinley and San Juan Counties, New Mexico.

SUMMARY: The following described Federally owned surface estate has been determined suitable for disposal by exchange under Section 206 of the Federal Land Policy and Management Act of October 21, 1976, as amended (FLPMA), 43 U.S.C. 1716.

New Mexico Principal Meridian

T. 20 N., R. 5 W.,
Sec. 15, N½NW¼SE¼, N½S½NW¼SE¼.
T. 23 N., R. 9 W.,
Sec. 1, lots 1, 2 (except the NW¼NW¼ of lot 2), S½NE¼.

Containing 181.10 acres, more of less. Not all of these lands would be exchanged, only the acreage needed to equalize the exchange.

In exchange for this Federal surface estate, the United States will acquire the following described surface estate from the Navajo Nation.

New Mexico Principal Meridian

T. 24 N., R. 9 W.,
Sec. 9, SW¼.

Containing 160.00 acres, more of less.

The purpose of this land exchange is to provide land for construction of a sewage lagoon to accommodate human health needs at the Ojo Encino Chapter of the Navajo Nation, provide land for economic development at the Nageezi Chapter of the Navajo Nation, and to acquire privately owned land located in the retention zone established in the Farmington Resource Management Plan (RMP). The exchange is an opportunity to provide land needed at the two Chapters while consolidating public land in response to a RMP decision. The public land is not needed for Federal purposes and the public interest will be served. This action is consistent with the Farmington RMP approved July 1988. The purpose of this Notice of Realty Action in the **Federal Register** is twofold. First, this Notice provides a response period of forty-five (45) days from the date of publication during which public comments regarding this land exchange will be accepted. Secondly, this action, as provided in 43 CFR 2201.1 (b), segregates the public land described above from all other forms of appropriation under the public land laws, including the mining laws, except for exchange under the FLPMA, and leasing under the mineral leasing laws. The segregative effect shall terminate: (1) with the issuance of a patent or other document of conveyance, (2) upon publication in the **Federal Register** of a termination of the segregation, or (3) two years from the date of this publication, whichever occurs first.

COMMENT DATES: For 45 days from date of publication in the **Federal Register**, interested parties may submit comments to the Bureau of Land Management at the address given below. Any adverse comments will be reviewed by the State Director who may sustain, vacate, or modify this realty action. In the absence of any adverse comments, this realty

action becomes the final determination of the Department of the Interior.

FOR FURTHER INFORMATION CONTACT: Jerry Crockford at (505) 599–6300. Information related to this action, including the environmental assessment, is available for review at the Bureau of Land Management, Farmington District Office, 1235 La Plata Highway, Farmington, New Mexico 87401.

SUPPLEMENTARY INFORMATION: The exchange is subject to the following:

1. Reservation to the United States of a right-of-way for ditches and canals in accordance with 43 U.S.C 945.

2. All minerals shall be reserved to the United States together with the right to prospect for, mine and remove the minerals.

3. All valid existing rights, e.g. rights-of-way and leases of record.

Joel Farrell,

Assistant District Manager for Lands and Renewable Resources.

Dated: September 7, 1993.

[FR Doc. 93–22396 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-FB-M

[UT–020–03–4210–04; U–69548]

Realty Action

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of realty action. Exchange of public lands in Tooele, Box Elder, and Rich Counties, Utah.

SUMMARY: The Bureau of Land Management is considering an exchange of land in Tooele, Box Elder, and Rich Counties, Utah. This notice provides a public comment period and segregates the lands described from entry and location under the mining laws, but not the mineral leasing laws or the material sale laws.

DATES: Comments must be received by October 29, 1993.

ADDRESS: Comments should be sent to the District Manager, Salt Lake District BLM, 2370 South 2300 West, Salt Lake City, Utah 84119.

FOR FURTHER INFORMATION CONTACT: Michael G. Nelson, BLM Salt Lake District Office, (801) 977–4300.

SUPPLEMENTARY INFORMATION: The following described lands have been found suitable for disposal by exchange pursuant to Section 206 of the Federal Land Policy and Management Act of 1976, (43 U.S.C. 1716):

Selected (Public) Lands

T. 1 N., R. 12 W., SLM,
Section 8, SE¼;
Section 9, S½;
Section 10, SW¼;
Section 15, W½;
Section 17, E½;
Section 20, NE¼;
Section 21, N½;
Section 22, NW¼ (excluding private land).
Containing approximately 1886 acres.

Offered (Private) Lands

Holt Property-Tooele County

T. 9 S., R. 3 W., SLM.

The following patented lode mining claims within sections 5, 8, and 9:

Alexander: Mineral Survey No. 5448
Angela: Mineral Survey No. 6197
Blue Tail: Lot No. 43
Bramel: Survey No. 5603
Delmonte: Lot No. 41
Dey: Survey No. 4567
Dolphin: Survey No. 5603
Eldorado: Lot No. 38
Essex: Lot No. 39
South Essex: Lot No. 44
Foster: Survey No. 5602
Grand Cross: Lot No. 40
Hall: Survey No. 5604
Heinze: Survey No. 5568
Isreal: Survey No. 5602
Iron Mountain: Lot No. 37
Knapp: Survey No. 5569
Pearl Athol: Survey No. 6194
Sanderson: Survey No. 5602
Warren: Survey No. 5569
Wolf: Survey No. 5448

Containing 393.861 acres.

Watts Property-Tooele County

T. 10 S., R. 8 W., SLM,
The Mary Ann Tucker, Mary Ann Tucker No. II, Bar "X" No. 1 Claim, and Bar "X" No. 3 Claim lode mining claims, Mineral Survey No. 7228, within Sections 27 and 34.
Containing 58.097 acres more or less.

Chournos Property-Box Elder County

T. 11 N., R. 16 W., SLM,
Section 30, NE¼.
T. 10 N., R. 17 W., SLM,
Section 3, All;
Section 4, Lot 4, SW¼NW¼;
Sections 9–11, All;
Sections 14–15, All;
Sections 17–19, All;
Section 20, N½NE¼, SW¼NE¼, W½, NW¼SE¼, S½SE¼;
Section 21, All;
Section 22, N½, SE¼, S½SW¼, NE¼SW¼;
Section 23, All;
Section 26–31, All;
Section 33–34, All;
Section 35, W½.
T. 11 N., R. 17 W., SLM,
Section 26, S½, S½N½;
Section 27, All;
Section 34, All;
Section 35, All.
T. 10 N., R. 18 W., SLM,
Section 13, All;
Section 24, All;
Section 25, All;
Section 35, All.
Containing 18,835.35 acres.

Goring Property-Rich County

T. 12 N., R. 5 E., SLM,
Section 13, Lot 2.
T. 12 N., R. 5 E., SLM,
Section 7, SW¼SE¼;
Section 17, SE¼SW¼;
Section 19, NE¼, SE¼NW¼, NE¼SW¼;
Section 20, N½;
Section 21, N½NW¼, SW¼NW¼.
Containing 804.62 acres.

Mayhue Property-Tooele County

T. 4 S., R. 4 W., SLM,
Section 8, Lot 7, W½ of lot 6.
Containing 54.895 acres.

Atkin Property-Tooele County

T. 4 S., R. 4 W., SLM,
Section 8, Lots 1,2,5, N½SW¼NE¼;
Also: That portion of the SW¼NW¼ lying within the following: Commencing at a point 25 rods West of the Southeast corner of the NE¼SW¼, and extending thence West 135 rods to the West Section line of said Section; thence North 160 rods; thence East 16 rods; thence southeasterly to the point of beginning. Containing 24 acres more or less.
Containing 136.67 acres.

Black Property-Tooele County

T. 4 S., R. 4 W., SLM,
Section 8, Lot 3, E½ of lot 6.
Containing 45.825 acres.
Grand Total of 20,329.318.

The purpose of this exchange is to acquire lands which have high values for wildlife, recreation, and riparian habitat. The exchange would also create a more logical and efficient land management pattern. The public interest will be served by completing the exchange.

The value of the lands to be exchanged are approximately equal.

The exchange will be made for both surface and subsurface estates, where possible. The mineral estate of some of the offered lands is held by other owners and will not be a part of this exchange.

The selected lands will have a reservation of a right-of-way for ditches and canals constructed by the authority of the United States under the provisions of the Act of August 30, 1890 (26 Stat. 391, 43 U.S.C. 945) and an access road to the GAPA archaeological site and will be subject to all existing rights-of-way.

In accordance with the regulations in 43 CFR 2201.1(b), the publication of this notice will segregate the public lands as described above, from appropriation under the public land laws, including the mining laws, but not the mineral leasing laws, nor the material sale laws. This segregation supersedes and replaces all previous segregations for the above described public lands. The segregation of the above described lands shall terminate upon issuance of a

document conveying such lands or upon publication in the **Federal Register** of a notice of termination of the segregation; or the expiration of two years from the date of publication, whichever occurs first. Information on the exchange is available from the District Manager, Bureau of Land Management, Salt Lake District Office, 2370 South 2300 West, Salt Lake City, Utah 84119.

Deane H. Zeller,

Salt Lake District Manager.

[FR Doc. 93–22404 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-DQ-M

National Park Service

National Register of Historic Places; Notification of Pending Nominations

Nominations for the following properties being considered for listing in the National Register were received by the National Park Service before September 4, 1993. Pursuant to § 60.13 of 36 CFR part 60 written comments concerning the significance of these properties under the National Register criteria for evaluation may be forwarded to the National Register, National Park Service, P.O. Box 37127, Washington, DC 20013–7127. Written comments should be submitted by September 29, 1993.

Carol D. Shull,

Chief of Registration, National Register.

Alabama

Talladega County

Idlewild, AL 5. 0.1 mi N of AL 21, Talladega vicinity, 93001012.

Arkansas

Benton County

Rogers Commercial Historic District (Boundary Increase) (Benton County MPS), Roughly bounded by Walnut, First, Poplar and Second Sts., Rogers, 93001028.

Faulkner County

Patton House, AR 25, Wooster, 93001026.

Izard County

Izard County Courthouse, AR 69 (Courthouse Square), Melbourne, 93001025.

Logan County

Gill, Tolbert E., House, AR 22 W of jct. with AR 109, Paris, 93001024.

Polk County

Bogg Springs Hotel, AR 84, Bogg Springs, 93001023.

California

Contra Costa County

Hard, Roswell Butler, House, 815 W. First St., Antioch, 93001020.

Los Angeles County

Cedar Avenue Complex, 44843 (44855), 44845 and 44851 Cedar Ave., 606 Lancaster Blvd., and Old Jail (no address), Lancaster, 93001017.

Mendocino County

Hofman, Charles, House, 308 S. School St., Ukiah, 93001022.

Orange County

Plummer, Louis, Auditorium, 201 E. Chapman Ave., Fullerton, 93001019.

San Diego County

Baker, Pearl, Row House (Lilian Rice-Designed Buildings in Rancho Santa Fe MPS), 6122 Paseo Delicias, Rancho Santa Fe, 93001018.

Carlsbad Santa Fe Depot, 400 Carlsbad Village Dr. (Elm Ave.), Carlsbad, 93001016.

District of Columbia

District of Columbia State Equivalent

Bunche, Ralph, House, 1510 Jackson St., NE., Washington, 93001013.

Cardozo, Francis L., Senior High School, Jct. of 13th and Clifton Sts., NW., Washington, 93001015.

Gulf Service Station, 2200 P St., NW., Washington, 93001014.

Florida

Polk County

Lakeland High School, Old, 400 N. Florida Ave., Lakeland, 93001027.

North Carolina

Wake County

Oaky Grove (Wake County MPS), Jct. of NC 2506 and NC 2507, SE, corner, Shotwell vicinity, 93001021.

Vermont

Caledonia County

Cobb School (Educational Resources of Vermont MPS), Jct. of Hardwick Town Hwy. 10 (Cobb School Rd.) and Sanborn Cemetery Rd., Hardwick, 93001007.

Chittendon County

Whitcomb, M.S., Farm (Agricultural Resources of Vermont MPS), US 2, Richmond, 93001010.

Winooski Falls Mill Historic District (Boundary Increase), 485–497 Colchester Ave., 5–21 Mill St., 8–32 Barrett St., Burlington, 93001009.

Washington County

Woodbury Graded School (Educational Resources of Vermont MPS), Jct. of Town Hwy. 22 and VT 14, Woodbury, 93001008.

Wisconsin

Richland County

Richland Center Archeological District, Address Restricted, Richland vicinity, 93001006.

Vernon County

Archeological Site No. 47 VE–881, Address Restricted, Sterling vicinity, 93001005.

Wyoming

Park County

Pioneer School, Co. Rd. 1–AG N of Badger Basin, Clark vicinity, 93001011.

[FR Doc. 93–22394 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-70-M

[Order 77, Amendment 15]

Regional Directors; Delegation of Authority

Order No. 77, approved February 27, 1973, and published in the **Federal Register** of March 22, 1973 (38 FR 7478), as amended, set forth in section 1 the exceptions on delegations of authority, and section 2 certain limitations on redelegation of authority.

Section 1 delegation is hereby amended by deleting paragraph (20).

Section 2 is hereby amended by changing paragraph 3 to read as follows:

Section, Redelegation * * *

(3) Authority to approve land acquisition priorities may not be redelegated. Authority to execute the land acquisition program, including contracting for acquisition of lands and related property, and options and offers to sell related thereto, may be redelegated only to the Chief, Land Resources Office, in the Regional Offices and Land Acquisition Field Officers.

Dated: August 31, 1993.

Roger Kennedy,

Director.

[FR Doc. 93–22395 Filed 9–13–93; 8:45 am]

BILLING CODE 4310-70-M

INTERSTATE COMMERCE COMMISSION

[Finance Docket No. 32334]

The Delaware-Lackawanna Railroad Co., Inc.; Operation Exemption; Line of Lackawanna County Railroad Authority

The Delaware-Lackawanna Railroad Co., Inc. (Delaware), a noncarrier, has filed a notice of exemption to operator under contract a 58.0-mile line of railroad between Fell Township and Mt. Pocono, PA owned by Lackawanna County Railroad Authority (LCRA) [1] and currently operated by Lackawanna Valley Railroad Corporation (LVAL) and Lackawanna Railway, Inc. (LRWY).[2] The line consists of the following three segments: (1) between former Delaware

[1] LCRA is a public rail authority and political subdivision established in 1985 under the laws of the Commonwealth of Pennsylvania for the purpose of preserving railroad branch lines.

[2] Delaware states that, in accordance with its operating agreement with LCRA, LVAL and LRWY will be terminating operations on August 26, 1993.

& Hudson Railway (D&H) milepost 174.59 in Fell Township and D&H milepost 196.9 in the Borough of Moosic (essentially Scranton, PA) (also including the 1.2 mile Vine Street Branch in Scranton); a grant of approximately 4.0 miles of incidental overhead trackage rights over the D&H's railroad between former Delaware, Lackawanna & Western Railway (DL&W) milepost 134.0 [3] at Bloom and former D&H milepost 130.4; and a grant of approximately 6.5 miles of incidental overhead trackage rights over Consolidated Rail Corporation's line of railroad between former DL&W milepost 136.7 at Minooka Jct. and former DL&W milepost 142.8 at Pittston Jct.; (2) between former DL&W milepost 134.0 and former DL&W milepost 132.0 in the City of Scranton which ihcludes the mainline, Brady lead track, and Chamberlain lead track; and (3) between former DL&W milepost 132.0 in the City of Scranton and former DL&W milepost 101.0 at Mt. Pocono.

This transaction is related to Finance Docket No. 32333, *Genesee Valley Transportation Company, Inc.—Continuance in Control Exemption—The Delaware-Lackawanna Railroad Co., Inc.*, wherein Genesee Valley Transportation Company, Inc. has concurrently filed a notice of exemption under 49 CFR 1180.2(d)(2) to continue to control of Delaware and four other class III rail carriers [4] when Delaware becomes a class III rail carrier upon consummation of this transaction on August 27, 1993.

Any comments must be filed with the Commission and served on: John D. Heffner, Esq., Gerst, Heffner, Carpenter & Precup, Suite 1107, 1700 K Street, NW., Washington, DC 20006.

This notice is filed under 49 CFR 1150.31. If this notice contains false or misleading information, the exemption is void *ab initio*. Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not automatically stay this transaction.

Decided: August 27, 1993.

By the Commission, Joseph H. Dettmar, Acting Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–22399 Filed 9–13–93; 8:45 am]

BILLING CODE 7035–01–M

[3] There was no former D&H milepost at former DL&W milepost 134.0 and conversely there was no former DL&W milepost at former D&H milepost 196.9.

[4] Depew, Lancaster & Western Railroad Co., Inc., Lowville and Beaver River Railroad Co., Mohawk, Adirondack & Northern Railroad Corp., and Genesee & Mohawk Valley Railroad Co.

[Finance Docket No. 32333]

Genesee Valley Transportation Company, Inc.—Continuance in Control Exemption—The Delaware-Lackawanna Railroad Co., Inc.; Notice of Exemption

Genesee Valley Transportation Company, Inc. (Genesee), a noncarrier, has filed a notice of exemption to continue in control of The Delaware-Lackawanna Railroad Co., Inc. (Delaware), upon Delaware becoming a class III rail carrier.

Delaware, a noncarrier, has concurrently filed a notice of exemption in Finance Docket No. 32334, The Delaware-Lackawanna Railroad Co., Inc.—Operation Exemption—Line of Lackawanna County Railroad Authority to operate approximately 58.0 miles of rail line owned by Lackawanna County Railroad Authority between Fell Township and Mt. Pocono, PA, under an operating agreement effective August 27, 1993. The operating agreement also includes the grant of incidental overhead trackage rights on:

(1) Approximately 4.0 miles of the Delaware & Hudson Railway Company's (D&H) line of railroad between former Delaware, Lackawanna & Western Railway (DL&W) milepost 134.0 at Bloom and former D&H milepost 130.4; and

(2) Approximately 6.5 miles of the Consolidated Rail Corporation's (Conrail) line of railroad between former DL&W milepost 136.7 at Minooka Jct. and former DL&W milepost 142.8 at Pittston Jct.

Genesee also controls four other class III rail carriers, including Depew, Lancaster & Western Railroad Co., Inc., Lowville and Beaver River Railroad Co., Mohawk, Adirondack & Northern Railroad Corp., and Genesee & Mohawk Valley Railroad Co. (Valley)[1] Genesee indicates that:

(1) The rail lines to be operated by Delaware will not connect with any other railroad in its corporate family;

(2) The continuance in control is not a part of a series of anticipated transactions that would connect the railroads with each other or any other railroad in its corporate family; and

(3) The transaction does not involve a class I carrier. Therefore, the transaction is exempt from the prior approval requirements of 49 U.S.C. 11343. See 49 CFR 1180.2(d)(2).

As a condition to use of this exemption, any employees affected by the transaction will be protected by the conditions set forth in New York Dock Ry.—Control—Brooklyn Eastern Dist., 360 I.C.C. 60 (1979).

Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the transaction. Pleadings must be filed with the Commission and served on: John D. Heffner, Esq., Gerst, Heffner, Carpenter & Precup, suite 1107, 1700 K Street, NW., Washington, DC 20006.

Decided: August 27, 1993.

By the Commission, Joseph H. Dettmar, Acting Director, Office of Proceedings.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–22400 Filed 9–13–93; 8:45 am]

BILLING CODE 7035–01–M

[1] The history of the Genesee corporate family is set forth in Finance Docket No. 32170, David Monte Verde, Michael Thomas, Charles Riedmiller, Jeffrey Baxter, and John Herbrand and Genesee Valley Transportation Company, Inc.—Continuance in Control Exemption—Genesee & Mohawk Valley Railroad Co. (not printed) served November 30, 1992 and the proceedings cited therein. In addition, Valley consummated its acquisition of certain Conrail trackage in Utica, Rome, and Batavia, NY on August 12, 1993.

Release of Waybill Data

The Commission has received a request from Gellman Research Associates, Inc. for permission to use certain data from the 1991–1992 ICC Waybill Samples.

A copy of the request (WB429–8/4/93) may be obtained from the ICC Office of Economics.

The waybill sample contains confidential railroad and shipper data; therefore, if any parties object to this request, they should file their objections (an original and 2 copies) with the Director of the Commission's Office of Economics within 14 calendar days of the date of this notice. The rules for release of waybill data [Ex Parte 385 (Sub-No. 2)] are codified at 49 CFR 1244.8.

Contact: James A. Nash, (202) 927–6196.

Sidney L. Strickland, Jr.,

Secretary.

[FR Doc. 93–22402 Filed 9–13–93; 8:45 am]

BILLING CODE 7035–01–M

[Finance Docket No. 32344]

Providence and Worcester Railroad Co.—Merger Exemption—Connecticut Rail Systems, Inc.; Notice of Exemption

Providence and Worcester Railway Company (P&W) and its wholly owned subsidiary, Connecticut Rail Systems, Inc. (CRSI), have filed a notice of exemption to merge CRSI into P&W, with P&W as the surviving entity. Under

the agreement and plan of merger, P&W will assume all rights, obligations and business functions of its subsidiary. The merger can be consummated on or after September 1, 1993.[1]

CRSI, a Class III carrier, operates approximately 10.2 miles of track in the State of Connecticut. P&W, a Class III rail carrier, owns and/or operates rail lines in the States of Connecticut, Massachusetts, and Rhode Island. P&W's rail lines include approximately 216 miles of main line track and approximately 149 miles of branch lines.

This is a transaction within a corporate family of the type specifically exempted from prior review and approval under 49 CFR 1180.2(d)(3). The purpose of the transaction is to simplify P&W's corporate structure and eliminate costs associated with separate accounting, bookkeeping, and reporting functions. Because CRSI is already controlled and operated by P&W, the transaction will cause no changes in the competitive balance with carriers outside the P&W corporate family, nor will it result in significant operational changes or adverse changes in service levels.

To ensure that all employees who may be affected by the transaction are given the protection afforded under 49 U.S.C. 10505(g)(2) and 49 U.S.C. 11347, the labor conditions set forth in *New York Dock Ry.—Control—Brooklyn Eastern Dist.*, 360 I.C.C. 60 (1979), are imposed.

Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not stay the transaction. Pleadings must be filed with the Commission and served on: Terence M. Hynes, 1722 Eye Street, NW., Washington, DC 20006.

Decided: September 3, 1993.

By the Commission, David M. Konschnik, Director, Office of Proceedings.

Signey L. Strickland, Jr.,

Secretary.

[FR Doc. 93–22401 Filed 9–13–93; 8:45 am]

BILLING CODE 7035-01-M

[1] The parties state that consummation was expected to occur on August 31, 1993. Under the class exemption invoked here, consummation may not occur until at least one week after the notice of exemption is filed. 49 CFR 1180.4(g)(1). This notice was filed with the Commission on August 25, 1993. Under 49 CFR 1104.7, when computing any period of time, the date of the act (filing) upon which the designated period of time begins to run is not included. This makes September 1, 1993, the earliest possible consummation date.

[Finance Docket No. 32324]

The Kansas City Southern Railway Co.—Purchase and Operation Exemption—the Atchison, Topeka and Santa Fe Railway Co.

AGENCY: Interstate Commerce Commission.

ACTION: Notice of exemption.

SUMMARY: Under 49 U.S.C. 10505, the Commission exempts from the prior approval requirements of 49 U.S.C. 11343, the purchase and operation by The Kansas City Southern Railway Company (KCS) of several line segments totalling about 87.2 miles, owned by The Atchison, Topeka and Santa Fe Railway Company (Santa Fe). The segments are located in Collin, Dallas, and Denton Counties, TX. The exemption is subject to standard employee protective conditions.

DATES: This exemption will be effective October 14, 1993. Petitions to stay must be filed by September 29, 1993. Petitions to reopen must be filed by October 12, 1993.

ADDRESSES: Send pleadings referring to Finance Docket No. 32324 to (1) Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423, and (2) Robert K. Dreiling, The Kansas City Southern Railway Company, 114 West 11th Street, Kansas City, MO 64105.

FOR FURTHER INFORMATION CONTACT: Beryl Gordon (202) 927–5610 [TDD for hearing impaired: (202) 927–5721].

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision. To purchase a copy of the full decision, write to, call, or pick up in person from: Dynamic Concepts, Inc., room 2229, Interstate Commerce Commission Building, Washington, DC 20423. Telephone: (202) 289–4357/4359. [Assistance for the hearing impaired is available through TDD services (202) 927–5721.]

Decided: August 27, 1993.

By the Commission, Chairman McDonald, Vice Chairman Simmons, Commissioners Phillips Philbin and Walden.

Sidney L. Strickland, Jr.

Secretary.

[FR Doc. 93–22398 Filed 9–13–93; 8:45 am]

BILLING CODE 7035-01-P

DEPARTMENT OF LABOR

Employment and Training Administration

[TA–W–28,781]

Villa Fashions, Inc., Shenandoah, Pennsylvania; Revised Determination on Reconsideration

On September 1, 1993, the Department issued an Affirmative Determination Regarding Application for Reconsideration for workers and former workers of the subject firm. This notice will soon be published in the Federal Register.

On reconsideration, the Department surveyed another manufacturer which contracted work to Villa Fashions in Shenandoah, Pennsylvania. The findings show that this manufacturer accounted for a substantial amount of the contract work supplied to the subject firm in 1992. Other findings show that this manufacturer increased its imports of ladies' blazers in 1992 and again in 1993 over the immediately preceding year.

The subject plant closed in May 1993 when all production ceased and most employees were laid off.

Conclusion

After careful consideration of the new facts obtained on reconsideration, it is concluded that the Villa Fashions, Inc., workers in Shenandoah, Pennsylvania were adversely affected by increased imports of articles like or directly competitive with the ladies' blazers produced at Villa Fashions in Shenandoah, Pennsylvania.

All workers of Villa Fashions, Inc., in Shenandoah, Pennsylvania who became totally or partially separated from employment on or after June 2, 1992 are eligible to apply for adjustment assistance under Section 223 of the Trade Act of 1974.

Signed at Washington, DC, this 2nd day of September 1993.

Stephen A. Wandner,

Deputy Director, Office of Legislation & Actuarial Service, Unemployment Insurance Service.

[FR Doc. 93–22438 Filed 9–13–93; 8:45 am]

BILLING CODE 4510-30-M

NATIONAL FOUNDATION ON THE ARTS AND HUMANITIES

Meeting; Music Advisory Panel

Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), as amended, notice is hereby given that a meeting of the Music Advisory Panel (Festivals/Jazz Special

Projects and Services to the Field Section) to the National Council on the Arts will be held on September 28–29, 1993 from 9 a.m. to 5:30 p.m. This meeting will be held in room 714, at the Nancy Hanks Center, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

A portion of this meeting will be open to the public from 4 p.m. to 5:30 p.m. on September 29, 1993 for a policy discussion and guideline review.

The remaining portions of this meeting from 9 a.m. to 5:30 p.m. on September 28, 1993 and from 9 a.m. to 4 p.m. on September 29, 1993 are for the purpose of Panel review, discussion, evaluation, and recommendation on applications for financial assistance under the National Foundation on the Arts and the Humanities Act of 1965, as amended, including information given in confidence to the agency by grant applicants. In accordance with the determination of the Chairman of November 24, 1992, these sessions will be closed to the public pursuant to subsection (c)(4), (6) and (9)(B) of section 552b of Title 5, United States Code.

Any person may observe meetings, or portions thereof, of advisory panels which are open to the public, and may be permitted to participate in the panel's discussions at the discretion of the panel chairman and with the approval of the full-time Federal employee in attendance.

If you need special accommodations due to a disability, please contact the Office of Special Constituencies, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506, 202/682–5532, TYY 202/682–5496, at least seven (7) days prior to the meeting.

Further information with reference to this meeting can be obtained from Ms. Yvonne Sabine, Committee Management Officer, National Endowment for the Arts, Washington, DC, 20506, or call 202/682–5439.

Dated: September 8, 1993.

Yvonne M. Sabine,

Director, Office of Panel Operations, National Endowment for the Arts.

[FR Doc. 93–22362 Filed 9–13–93; 8:45 am]

BILLING CODE 7537-01-M

Meeting; Theater Program Task Force

Notice is hereby given that a meeting of the Theater Program Task Force will be held on September 27, 1993 from 9:30 a.m. to 5 p.m. in room M–09 at the Nancy Hanks Center, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

Portions of this meeting will be open to the public from 9:30 a.m. to 9:45 a.m. for introductions and a re-cap of the August 23, 1993 Task Force Meeting, and from 4 p.m. to 5 p.m. for a discussion of how to communicate task force ideas to the field.

During the remaining portion of this meeting from 9:45 a.m. to 4 p.m., the Task Force will discuss non-public commercial or financial information of intrinsic value, and will go into closed session pursuant to subsection (c)(4) of the Government in the Sunshine Act, 5 U.S.C. 522b. Additionally, discussion concerning purely personal information about individuals submitted with grant applications, (e.g., personal biographical and salary data or medical information) as well as discussion of deliberations of specific panels on which Task Force members have served (information which remains confidential even after the final grant decision is made), will be conducted by the Task Force in closed session in accordance with subsection (c)(6) of 5 U.S.C., 522.

Any interested person may attend, as observers, the portion of the Task Force discussions which is open to the public, on a space available basis.

If you need special accommodations due to a disability, please contact the Office of Special Constituencies, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506, 202/682/5532, TYY 202/682–5496, at least seven (7) days prior to the meeting.

Further information with reference to this meeting can be obtained from Ms. Yvonne Sabine, Committee Management Officer, National Endowment for the Arts, Washington, DC 20506, or call 202/682/5439.

Dated: September 8, 1993.

Yvonne M. Sabine,

Director, Office of Panel Operations, National Endowment for the Art.

[FR Doc. 93–22363 Filed 9–13–93; 8:45 am]

BILLING CODE 7537-01-M

NATIONAL SCIENCE FOUNDATION

Special Emphasis Panel in Mathematical Sciences; Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation announces the following meeting.

Name: Special Emphasis Panel in Mathematical Sciences.

Date and Time: September 28–29, 1993; 9 a.m. to 5 p.m.

Place: Room 500A, 1110 Vermont Avenue, NW., Washington, DC.

Type of Meeting: Closed.

Contact Person: Dr. Kent Wilson, Special Assistant, MPS, National Science Foundation, 1800 G St. NW., Washington, DC 20550. Telephone: (202) 357–7995.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate Small Business Innovation Research proposals as part of the selection process for awards.

Reason for Closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c), (4) and (6) of the Government in the Sunshine Act.

Dated: September 8, 1993.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 93–22360 Filed 9–13–93; 8:45 am]

BILLING CODE 7555-01-M

NUCLEAR REGULATORY COMMISSION

Staff Meetings Open to the Public; Proposed Policy Statement

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed policy statement; request for comment.

SUMMARY: This proposed policy statement presents the guidance which the Nuclear Regulatory Commission (NRC) staff proposes to follow in opening meetings between the NRC staff and one or more outside persons to public observation. The proposed policy statement applies solely to NRC staff-sponsored and conducted meetings and not to meetings conducted by outside entities that NRC staff members might attend and participate in. This policy also announces proposed central agency services available to the public for obtaining schedules for the staff meetings that are open to public attendance. The policy will be issued to the NRC staff as a management directive. Comments are invited on this policy and on the specific concerns raised by the American Mining Congress set forth in this document.

DATES: Comment period expires November 15, 1993. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date.

ADDRESSES: Send comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington DC 20555. Attn: Docketing and Service Branch.

Hand deliver comments to: 11555 Rockville Pike, Rockville, Maryland between 7:45 a.m. and 4:15 p.m. on Federal workdays.

FOR FURTHER INFORMATION CONTACT: Donnie H. Grimsley, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone: (301) 492–7211.

SUPPLEMENTARY INFORMATION:

PROPOSED STATEMENT OF POLICY

A. Introduction

The NRC has a longstanding practice of providing the public with the fullest information practicable on its activities and of conducting business in an open manner, while balancing the need for the NRC staff to exercise its regulatory and safety responsibilities without undue administrative burden. This policy is wholly a matter of NRC discretion and can be and will be departed from as NRC convenience and necessity may dictate. This policy supersedes the policy approved by the Executive Director for Operations that was published in the **Federal Register** on June 28, 1978 (43 FR 28058).

B. Definition of Public Meeting:

1. A public meeting is a planned, formal encounter between one or more NRC staff members and one or more outside persons with the expressed intent of discussing substantive issues that are directly associated with NRC's regulatory and safety responsibilities. This policy applies solely to NRC staff-sponsored and conducted meetings and not to meetings conducted by outside entities that NRC staff members might attend and participate in.

2. An outside person is any individual who is not—

a. An NRC employee;

b. Under contract to the NRC;

c. Acting in an official capacity as a consultant to the NRC;

d. Acting in an official capacity as a representative of an agency of the executive, legislative, or judicial branch of the U.S. Government (except when the agency is subject to NRC regulatory oversight);

e. Acting in an official capacity as a representative of a foreign government.

C. Exemptions

1. This definition applies to meetings between the NRC staff and outside persons. It does not apply to the Commission or offices that report directly to the Commission. Similarly, it does not apply to meetings between the NRC staff and representatives of State governments, including Agreement State representatives, relating to NRC Agreement State activities or to State regulatory actions or to other matters of general interest to the State or to the Commission, that is, matters other than specific NRC licensing or regulatory actions involving specific licensees. Also, the definition of a public meeting is not intended to apply to or supersede any existing law, rule, or regulation that addresses public attendance at a specific type of meeting. For example, 10 CFR part 7 specifically addresscs public attendance at advisory committee meetings; 10 CFR part 2, appendix C, addresses public attendance at enforcement conferences; and 10 CFR part 9, subpart C, addresses public attendance at Commission meetings.

2. In general, meetings between the NRC staff and outside parties will be classified as public meetings unless the NRC staff determines that—

The subject matter to be discussed—

a. Is specifically authorized by an Executive Order to be kept secret in the interests of national defense or foreign policy (classified information);

b. Contains trade secrets and commercial or financial information (proprietary information);

c. Contains safeguards information;

d. Is of a personal nature where such disclosure would constitute a clearly unwarranted invasion of personal privacy;

e. Is related to a planned, ongoing, or completed investigation and/or contains information compiled for law enforcement purposes;

f. Could result in the inappropriate disclosure and dissemination of preliminary, unverified information;

g. Has no direct, substantive connection to a specific NRC regulatory decision or action;

h. Indicates that the administrative burden associated with public attendance at the meeting could result in substantially interfering with the NRC staff's execution of its safety and regulatory responsibilities.

3. It is important to note that whether or not a meeting should be open for public attendance is dependent primarily on the subject matter to be discussed, not on whom within the NRC staff is participating (e.g., staff level versus senior management).

D. Notice to the Public

Normally, meeting announcement information is to be provided by the staff to the agency's meeting announcement coordinator at least ten days in advance of the date of the meeting so that adequate notice can be made to the public. Public notice will be provided weekly via a press release and posting in the agency headquarter's Public Document Room, 2120 L Street (Lower Level) NW., Washington, DC. The public may obtain a schedule of agency staff meetings via a toll-free telephone recording and toll-free electronic bulletin board (telephone numbers to be announced when the final policy statement is announced).

Meetings which are scheduled for the next 60 days will be announced to the public. Meeting announcements will include the date, time, and location of the meeting, as well as its purpose, the agency and outside organizations in attendance, and the name and telephone number of the agency contact for the meeting. Information about canceled, rescheduled, and open meetings scheduled on short notice will be updated daily or as needed via the posting at the agency Public Document Room, the telephone recording, and the electronic bulletin board.

Discussion of the Policy

The purpose of revising the open meeting policy is to further the goal of giving meaningful opportunities for the public to be informed of NRC activities without unduly affecting open and candid discussions between licensees and the NRC staff or interfering with the staff's ability to exercise its regulatory and safety responsibilities without undue administrative burden. The policy also provides staff guidance regarding what types of meetings should be open to public observation. The meeting policy is wholly a matter of NRC discretion and can be and will be departed from as NRC convenience and necessity may dictate.

The policy distinguishes between a planned, formal encounter from one that occurs informally, such as when an NRC official finds that an opportunity comes available while at a licensee's site to meet with a new plant manager or with a corporate official who is visiting the site, or when a licensee official attending an open meeting at an NRC office finds the Regional Administrator has time to visit with him for a short period. Such informal meetings are limited to those that do not have the express intent of discussing substantive issues that are directly associated with the NRC's regulatory and safety responsibilities.

The policy excludes meetings where the express intent is not to discuss substantive issues that are directly associated with NRC's regulatory and safety responsibilities. Such meetings could include training, conferences, and association meetings where both NRC staff and applicant/licensee officials participate. The policy also excludes meetings the NRC staff has with its own

employees, contractors, and consultants, other Federal government agencies where the matter does not relate to a specific activity for which NRC has oversight, and with representatives of foreign governments and State representatives on matters other than relating to specific NRC licensing or regulatory actions involving specific licensees.

The exceptions to staff meetings that will be open to the public permit meetings to be closed to ensure that classified, commercial or financial proprietary, safeguards, personal privacy and investigative information protected by statute or otherwise requiring protection is not disclosed to the public. The final three exceptions ensure that the staff has sufficient flexibility to carry out their responsibilities without being inhibited by the need to announce the meeting as one open to the public where it would interfere with the performance of the Commission's safety and regulatory responsibilities.

A meeting to discuss preliminary, unverified information is not an open meeting under the policy. The purpose of this exception is to ensure that licensees and applicants will not be inhibited in bringing to the Commission information that is preliminary in nature or is not verified or sufficiently analyzed to draw firm conclusions. It also ensures that discussions about potential implications of this information occur candidly and openly without fear that they may be misunderstood by the public as fact or as final conclusions.

A meeting where the subject matter has no direct, substantive connection to a specific NRC regulatory decision or action is not an open meeting under this policy. The purpose of this exception is to ensure that routine administrative matters relating to regulatory activities can be carried out efficiently. Meetings to discuss the status of actions, schedules for NRC action, an applicant's or licensee's activities, or general issues not directly related to a decision or action before the staff would not be open meetings under this exception.

The final exception is for meetings where the administrative burden associated with public attendance could result in substantially interfering with the NRC staff's execution of its safety and regulatory responsibilities. This exception ensures that the staff has the discretion to have a needed meeting on short notice where adequate public notice cannot be provided without placing an undue burden on the agency. The meeting could be necessary because of an urgent issue that needs addressing or where the opportunity becomes available on short notice to meet with an official of the applicant or licensee that would benefit the staff person in carrying out his or her duties. The meeting also might be in a location that does not have the facilities to easily accommodate the public, such as short morning meetings of resident inspectors with the plant manager, because such would require a daily effort to establish access authorization to protected areas. The meeting may not be able to be scheduled with sufficient definiteness to permit adequate public notice, such as when an inspector conducts an exit meeting with an applicant/licensee official at the conclusion of a routine inspection. A meeting with an applicant/licensee where agency staff is responding to a significant safety or safeguards event would not be open under this exception because to open such a meeting would be an undue burden on inspectors in that it would interfere with their safety and regulatory responsibilities at a time when they are focused on understanding and resolving significant safety or safeguards problems. Similarly, NRC inspections are not public meetings under this policy.

The system planned for providing public notice of all NRC staff open meetings will have a single toll-free telephone recording and an electronic bulletin board for providing meeting notice information. Open staff meetings will also be announced by a weekly press release as well as being posted in the agency's Public Document Room, as is the current practice.

American Mining Congress Concerns

The American Mining Congress (AMC) has expressed concerns on the agency's interim policy on open staff meetings. The interim policy is similar to the proposed policy statement. It has been used by the Office of Nuclear Reactor Regulation, Office for Analysis and Evaluation of Operational Data, and NRC regional offices since September 1992. The proposed policy statement differs from the interim policy statement in that several exemptions have been clarified. Several of these changes may have addressed the concerns of AMC. However, since the concerns raise issues that may still be applicable to the current policy statement, they are being presented and comments are invited on them.

First, the AMC expressed the concern that the policy definition is too broad and the exemptions are not adequate to provide licensees with a clear understanding on how the policy will be implemented.

Second, they expressed the concern that the policy adds little value to existing procedures and opportunities for meaningful and appropriate public participation and would create a substantial hindrance in important, ongoing communications between NRC and its licensees.

Third, the AMC believes that the policy is in conflict with 10 CFR 2.102, which permits staff to request applicants and licensees to confer informally with the staff and that the policy will likely discourage licensees from reporting and resolving compliance issues with NRC staff because it mandates public notice and potential access to the meetings by third parties. Also, the AMC believes that resolution of technical and enforcement matters will be protracted and more contentious than under the present policy and may often result in more litigation because it would chill the free exchange of ideas and information, and, in effect, create a significant roadblock to fulfillment of the Commission's regulatory responsibilities.

Fourth, the AMC saw the need for meetings to be scheduled in advance to ensure adequate public notice as hindering the regulatory process because it could prevent meetings from being held on short notice to resolve issues of immediate concern and could delay resolution of routine matters such as those relating to schedules.

Fifth, the AMC expressed concern that the policy would require increased expenditures by NRC and licensees to organize and monitor the meetings and respond to public comments. Also it stated that licensee fees should not be charged to cover meeting expenses unless the outside party also pays.

Sixth, the AMC expressed concern that the meetings will be used by outside parties to advance their personal agendas and stated that technical meetings between the NRC and licensees are not the proper forum for raising public policy issues.

Dated at Rockville, Maryland, this 8th day of September, 1993.

For the Nuclear Regulatory Commission.

Samuel J. Chilk,

Secretary of the Commission.

[FR Doc. 93–22391 Filed 9–13–93; 8:45 am]

BILLING CODE 7590–01–P

Power Authority of the State of New York; James A. FitzPatrick Nuclear Power Plant; Partial Withdrawal of Application for Amendment to Facility Operating License

The United States Nuclear Regulatory Commission (the Commission) has

granted the request by the Power Authority of the State of New York (PASNY or the licensee) to withdraw a portion of their June 16, 1993, application for a proposed amendment to Facility Operating License No. DPR–59 for the James A. FitzPatrick Nuclear Power Plant located in Oswego County, New York.

The proposed amendment involved changes to the Technical Specifications (TSs) to extend the current intervals for bench checking and disassembling safety/relief valves in accordance with TSs 4.6.E.1 and 4.6.E.2, and for functionally testing 10 percent of each snubber type in accordance with TS 4.6.1.3. The proposed changes would also extend the current interval for testing excess flow check valves in accordance with TS 4.7.D.1.b. PASNY requested extensions of these surveillance intervals until the start of the next refueling outage, scheduled to start in January 1995. The portions of the license amendment relating to safety/relief and excess flow check valve testing were approved in License Amendment No. 195 that was issued on August 11, 1993.

On August 19, 1993, the licensee submitted a letter to the NRC requesting withdrawal of the requested extension of the current surveillance interval for snubbers. The licensee requested withdrawal on the basis that the extension of the surveillance interval was not required.

The Commission has previously issued a Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing which was published in the **Federal Register** on July 7, 1993 (58 FR 36444).

For further details with respect to this action, see the application for amendment dated June 16, 1993, the supplement to the application dated July 30, 1993, and the licensee's letter of August 19, 1993, which withdrew the portion of the application for license amendment. The above documents are available for public inspection at the Commission's Public Document Room, 2120 L Street NW., Washington, DC 20555 and the Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York.

Dated at Rockville, Maryland, this 7th day of September 1993.

For the Nuclear Regulatory Commission.

John E. Menning,

Project Manager, Project Directorate I–1, Division of Reactor Projects—I/II, Office of Nuclear Reactor Regulation.

[FR Doc. 93–22393 Filed 9–13–93; 8:45 am]

BILLING CODE 7590–01–M

SECURITIES AND EXCHANGE COMMISSION

Self-Regulatory Organizations; Applications for Unlisted Trading Privileges; Opportunity for Hearing; Chicago Board Options Exchange, Inc.

September 8, 1993.

The above named national securities exchange has filed applications with the Securities and Exchange Commission ("Commission") pursuant to Section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f-1 thereunder for unlisted trading privileges in the following securities:

Republic of Austria
Stock Index Growth Notes (File No. 7–11235)
Merrill Lynch
Market Index Target-Term Securities (File No. 7–11236)

These securities are listed and registered on one or more other national securities exchange and are reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before September 29, 1993, written data, views and arguments concerning the above-referenced application. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 5th Street, NW., Washington, DC 20549. Following this opportunity for hearing, the Commission will approve the application if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such applications are consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 93–22411 Filed 9–13–93; 8:45 am]

BILLING CODE 8010–01–M

[File No. 1–11153]

Issuer Delisting; Application to Withdraw from Listing and Registration; (Air Methods Corporation, Common Stock, $.06 Par Value)

September 8, 1993.

Air Methods Corporation ("Company") has filed an application with the Securities and Exchange Commission ("Commission"), pursuant to section 12(d) of the Securities Exchange Act of 1934 ("Act") and Rule 12d2–2(d) promulgated thereunder, to withdraw the above specified security from listing and registration on the American Stock Exchange, Inc. ("Amex").

The reasons alleged in the application for withdrawing this security from listing and registration include the following:

According to the Company, its Board of Directors (the "Board") unanimously approved resolutions on July 9, 1993, to withdraw the Company's Common Stock from listing on the Amex's Emerging company Marketplace ("ECM"), and, instead, list such Common Stock on the National Association of Securities Dealers Automated Quotations/National Market Systems ("NASDAQ/NMS"). According to the Company, the decision of the Board followed a lengthy study of the matter, and was based upon the belief that listing of the Common Stock on NASDAQ/NMS will be more beneficial to its stockholders than the present listing on the Amex because:

(1) The Company believes that the NASDAQ/NMS system of competing market-makers will result in increased visibility and sponsorship for the Common Stock and will offer the Company's shareholders more liquidity than is presently available on the Amex ECM, and less volatility in quoted prices per share when trading volume is slight;

(2) The Company believes that the NASDAQ/NMS system will offer the opportunity for the Company to secure its own group of market-makers who will be more inclined to issue research reports concerning the Company, thereby increasing the number of firms providing institutional research and advisory reports, and in doing so, expand the capital base available for trading in its Common Stock;

(3) The Company believes if the Common Stock is traded on the NMS it will be entitled to exemptions from certain registration requirements under the securities or Blue Sky Laws of a number of states which exemptions are

not available for securities listed on the Amex ECM; and

(4) The Board has determined that the company and the stockholders of the Company will benefit from the Company's Common Stock being traded on the NASDAQ/NMS rather than on the Amex ECM, where the Common Stock is now listed.

Any interested person may, on or before September 29, 1993 submit by letter to the Secretary of the Securities and Exchange Commission, 450 Fifth Street NW., Washington, DC 20549, facts bearing upon whether the application has been made in accordance with the rules of the exchanges and what terms, if any, should be imposed by the Commission for the protection of investors. The Commission, based on the information submitted to it, will issue an order grating the application after the date mentioned above, unless the Commission determines to order a hearing on the matter.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 93–22410 Filed 9–13–93; 8:45 am]

BILLING CODE 8010-01-M

[File No. 1–11694]

Issuer Delisting; Application to Withdraw from Listing and Registration; (BioSafety Systems, Inc., Common Stock, $0.01 Par Value)

September 8, 1993.

BioSafety Systems, Inc. ("Company") has filed an application with the Securities and Exchange Commission ("Commission"), pursuant to Section 12(d) of the Securities Exchange Act of 1934 ("Act") and Rule 12d2–2(d) promulgated thereunder, to withdraw the above specified security from listing and registration on the American Stock Exchange, Inc. ("Amex").

The reasons alleged in the application for withdrawing this security from listing and registration include the following:

According to the Company, its Board of Directors (the "Board") unanimously approved resolutions on August 6, 1993, to withdraw the Company's Common Stock from listing on the Amex and, instead, list such Common Stock on the National Association of Securities Dealers Automated Quotations/National Market Systems ("NASDAQ/NMS"). According to the Company, the decision of the Board followed a lengthy study of the matter, and was based upon the belief that listing of the Common Stock on NASDAQ/NMS will be more beneficial to its stockholders than the present listing on the Amex because:

(1) The company believes that the NASDAQ/NMS system of competing market-makers will result in increased visibility and sponsorship for the Common Stock than is presently the case with the single specialist assigned to the stock on the Amex;

(2) The Company believes that the NASDAQ/NMS system will offer the Company's stockholders more liquidity than is presently available on the Amex and less volatility in quoted prices per share when trading volume is slight;

(3) The Company believes that the NASDAQ/NMS system will offer the opportunity for the Company to secure its own group of market-makers and, in doing so, expand the capital base available for trading in its Common Stock; and

(4) The Company believes that firms making a market in the Company's Common Stock on the NASDAQ/NMS system will be inclined to issue research reports concerning the Company, thereby increasing the number of firms providing institutional research and advisory reports.

Any interested person may, on or before September 29, 1993, submit by letter to the Secretary of the Securities and Exchange Commission, 450 Fifth Street NW., Washington, DC 20549, facts bearing upon whether the application has been made in accordance with the rules of the exchanges and what terms, if any, should be imposed by the Commission for the protection of investors. The Commission, based on the information submitted to it, will issue an order granting the application after the date mentioned above, unless the Commission determines to order a hearing on the matter.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 93–22409 Filed 9–13–93; 8:45 am]

BILLING CODE 8010-01-M

SMALL BUSINESS ADMINISTRATION

Reporting and Recordkeeping Requirements Under OMB Review

ACTION: Notice of reporting requirements submitted for review.

SUMMARY: Under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35), agencies are required to submit proposed reporting and recordkeeping requirements to OMB for review and approval, and to publish a notice in the **Federal Register** notifying the public that the agency has made such a submission.

DATES: Comments should be submitted by October 14, 1993. If you intend to comment but cannot prepare comments promptly, please advise the OMB Reviewer and the Agency Clearance Officer before the deadline.

COPIES: Request for clearance (S.F. 83), supporting statement, and other documents submitted to OMB for review may be obtained from the Agency Clearance Officer. Submit comments to the Agency Clearance Officer and the OMB Reviewer.

FOR FURTHER INFORMATION CONTACT:

Agency Clearance Officer: Cleo Verbillis, Small Business Administration, 409 3RD Street S.W., 5th Floor, Washington, DC 20416, Telephone: (202) 205–6629

OMB Reviewer: Gary Waxman, Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, Washington, DC 20503

Title: Application for Certification as a Certified Development Company

Form No.: 1246

Frequency: On Occasion

Description of Respondents: Applicants to become CDCs

Annual Responses: 15

Annual Burden: 150

Cleo Verbillis,

Chief Administrative Information Branch.

[FR Doc. 93–22379 Filed 9–13–93; 8:45 am]

BILLING CODE 8025-01-M

[Declaration of Disaster Loan Area #2661]

Iowa; Amendment #1; Declaration of Disaster Loan Area

The above-numbered Declaration is hereby amended to extend the deadline for filing applications for physical damage to November 15, 1993.

All other information remains the same, i.e., the termination date for filing applications for economic injury is April 11, 1994.

The economic injury number for Iowa is 793100.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008.)

Dated: September 2, 1993.

Bernard Kulik,

Assistant Administrator for Disaster Assistance.

[FR Doc. 93–22380; Filed 9–13–93; 8:45 am]

BILLING CODE 8025-01-M

[Declaration of Disaster Loan Area #2669]

Kansas; Amendment #6; Declaration of Disaster Loan Area

The above-numbered Declaration is hereby amended in accordance with Notices from the Federal Emergency Management Agency, dated August 26 and 30, 1993, to include Mitchell County in the State of Kansas as a disaster area as a result of damages caused by flooding and severe storms, and to establish the incident period for this disaster as beginning on June 28, 1993 and continuing through August 26, 1993. The Declaration is further amended to extend the deadline for filing applications for physical damage to November 15, 1993.

All counties contiguous to the above-named primary county have been previously declared.

The termination date for filing applications for economic injury is April 25, 1994.

The economic injury number for Kansas is 793500.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008.)

Dated: September 2, 1993.

Bernard Kulik,

Assistant Administrator for Disaster Assistance.

[FR Doc. 93–22381 Filed 9–13–93; 8:45 am]

BILLING CODE 8025–01–M

[Declaration of Disaster Loan Area #2664]

Minnesota; Amendment #4; Declaration of Disaster Loan Area

The above-numbered Declaration is hereby amended in accordance with Notices from the Federal Emergency Management Agency, dated August 25 and 27, 1993, to include Wright County in the State of Minnesota as a disaster area as a result of damages caused by severe storms, flooding, and tornadoes, and to establish the incident period for this disaster as beginning on May 6, 1993 and continuing through August 25, 1993.

In addition, applications for economic injury loans from small businesses located in the contiguous county of Sherburne, Minnesota may be filed until the specified date at the previously designed location.

Any counties contiguous to the above-named primary county and not listed herein have been previously declared.

All other information remains the same, i.e., the termination date for filing applications for physical damage is November 15, 1993 and for economic injury the deadline is April 11, 1994.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008.)

Dated: September 2, 1993.

Bernard Kulik,

Assistant Administrator for Disaster Assistance.

[FR Doc. 93–22382 Filed 9–13–93; 8:45 am]

BILLING CODE 8025–01–M

[Declaration of Disaster Loan Area #2663]

Missouri; Amendment #5; Declaration of Disaster Loan Area

The above-numbered Declaration is hereby amended in accordance with a Notice from the Federal Emergency Management Agency dated August 26, 1993 to include Crawford, St. Clair, St. Francois, Stoddard, and Wayne Counties in the State of Missouri as a disaster area as a result of damages caused by severe storms and flooding beginning on June 10, 1993 and continuing. This Declaration is further amended to extend the deadline for filing applications for physical damage to November 15, 1993.

In addition, applications for economic injury loans from small businesses located in the contiguous counties of Butler, Carter, Cedar, Dent, Iron, and Reynolds in the State of Missouri may be filed until the specified date at the previously designated location.

Any counties contiguous to the above-named primary counties and not listed herein have been previously declared.

The termination date for filing applications for economic injury is April 11, 1994.

The economic injury number for Missouri is 793300.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008.)

Dated: September 2, 1993.

Bernard Kulik,

Assistant Administrator for Disaster Assistance.

[FR Doc. 93–22383 Filed 9–13–93; 8:45 am]

BILLING CODE 8025–01–M

[Declaration of Disaster Loan Area #2667]

Nebraska; Amendment #5; Declaration of Disaster Loan Area

The above-numbered Declaration is hereby amended to extend the deadline for filing applications for physical damage to November 15, 1993.

All other information remains the same, i.e., the termination date for filing applications for economic injury is April 19, 1994.

The economic injury number for Nebraska is 793400.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008.)

Dated: September 2, 1993.

Bernard Kulik,

Assistant Administrator for Disaster Assistance.

[FR Doc. 93–22384 Filed 9–13–93; 8:45 am]

BILLING CODE 8025–01–M

DEPARTMENT OF TRANSPORTATION

Federal Transit Administration

Environmental Impact Statement on the Vasona Corridor Light Rail Transit Project in Santa Clara County, CA

AGENCY: Federal Transit Administration, DOT.

ACTION: Notice of Intent to prepare Environmental Impact Statement.

SUMMARY: The Federal Transit Administration (FTA) and Santa Clara County Transit District (SCCTD) hereby give notice that they intend to prepare an Environmental Impact Statement (EIS) for light rail transit improvements in the Vasona Corridor area of Santa Clara County, California. FTA and the SCCTD will prepare the EIS in conformance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321), the Regulations for Implementing the Procedural Requirements of NEPA, Council on Environmental Quality (40 CFR parts 1500–1508), Environmental Impact and Related Procedures, FTA (49 CFR parts 622), and the appropriate Congressional Acts and Executive orders pertaining to federal environmental documents. The SCCTD will ensure that the EIS also satisfies the requirements of the California Environmental Quality Act (CEQA) and serves as the Environmental Impact Report (EIR) required by CEQA. Scoping will be accomplished through correspondence with interested persons, organizations, and Federal, state, and local agencies and through a public scoping meeting. See **SUPPLEMENTARY INFORMATION** below for details.

DATES:

Comment Due Date: Written comments on the scope of alternatives and impacts to be considered should be sent to Julie Render, Santa Clara County Transportation Agency by October 15, 1993.

Scoping Meeting: A public scoping meeting will be held on Thursday, September 30, 1993 at 7 p.m. at the Campell City Council Chambers. See **ADDRESSES** below.

ADDRESSES: Written comments on the project scope should be sent to Julie Render, Environmental Analyst, Santa

Clara County Transportation Agency, 3331 North First Street, Building B, 2nd Floor, San Jose, CA 95134–1906. The public scoping meeting will be held at the Campbell City Council Chambers, 70 North First Street, Campbell, CA 95008.

FOR FURTHER INFORMATION CONTACT: Mr. Jerome Wiggins, Office of Program Operations, Federal Transit Administration, Region 9, U.S. Department of Transportation, Telephone: (415) 744–3115.

SUPPLEMENTARY INFORMATION:

I. Scoping

The FTA and SCCTD invite the public and affected Federal, State and local agencies to participate in defining the alternatives to be evaluated in the EIS/EIR and identifying the significant social, economic, or environmental issues related to the proposed project. The SCCTD will conduct scoping to help establish the purpose, scope, framework, and approach for the analysis in the EIS. An information packet describing the purpose of the project, the proposed alternatives, the impact areas to be evaluated, and preliminary schedule is being mailed to affected Federal, State and local agencies and to interested parties on record. Others may request the scoping materials by contacting Julie Render at the address above, or by calling (408) 321–5789. Scoping comments may be made verbally at the public scoping meeting or in writing. See the **DATES** and **ADDRESSES** sections above for locations and times. During scoping, comments should focus on identifying specific social, economic or environmental impacts to be evaluated and suggesting alternatives which are less costly or less environmentally damaging while achieving similar transit objectives. Scoping is not the appropriate time to indicate a preference for a particular alternative. Comments on preferences should be communicated after the Draft EIS/EIR has been completed. If you wish to be placed on the mailing list to receive further information as the project develops, contact Julie Render as previously described.

II. Description of Study Area and Project Need

The Vasona Corridor is the name given to a heavily traveled transportation corridor approximately 6 miles in length in Santa Clara County. It extends from downtown San Jose on the north, traverses the City of Campbell and continues south to the Town of Los Gatos. The Vasona Corridor is generally oriented in a northeast-southwest direction. The Vasona Corridor has been identified in Santa Clara County's comprehensive Transportation 2010 study as one of the top three high priority transportation corridors for future major capital improvements. The proposed facility is primarily within the existing Southern Pacific Railroad (SPRR) right-of-way. As part of the regional public transit system, the Vasona Corridor Project would provide improved accessibility to the Peninsula CalTrain passenger rail system, the Guadalupe and Tasman Corridor light rail systems, and numerous County Transit bus routes.

III. Alternatives

The EIS will address the No-Project and two light rail transit (LRT) alternatives in detail, and also will include a discussion of other alternatives considered. Both LRT alternatives follow the same alignment along the Southern Pacific Railroad right-of-way from San Jose to the project terminus in Los Gatos. Different options are presented for the LRT track alignment in downtown San Jose. One of the LRT alternatives includes ten stations, the other includes eleven stations. Both LRT alternatives include five park-and-ride facilities.

IV. Probable Effects

The FTA and SCCTD propose to evaluate in the EIS all significant social, economic, and environmental impacts of the alternatives under consideration. The impacts analyzed will include noise and vibration, residential and business displacements, changes in development patterns and land use, community disruption, traffic and parking changes, effects on historic sites, degradation of local air quality, aesthetic quality of the area, and the disruption of recreation facilities, wetlands, floodplains, ecologically sensitive areas, and natural and man-made hazardous materials sites. These impacts will be evaluated both for the construction period and for the long-term operation of each alternative. Measures to mitigate significant adverse impacts will be explored.

V. FTA Procedures

After its publication, the Draft EIS/EIR will be available for public and agency review and comment, and a public hearing will be held. After the public comment period has closed, the SCCTD will prepare the Final EIS/EIR.

Issued on: September 8, 1993.

Leslie Rogers,

Deputy Regional Administrator.

[FR Doc. 93–22372 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–57–M

National Highway Traffic Safety Administration

[Docket No. 93–66; Notice 1]

Notice of Receipt of Petition for Determination That Nonconforming 1990 Mercedes-Benz 420SEL Passenger Cars Are Eligible for Importation

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice of receipt of petition for determination that nonconforming 1990 Mercedes-Benz 420SEL passenger cars are eligible for importation.

SUMMARY: This notice announces receipt by the National Highway Traffic Safety Administration (NHTSA) of a petition for a determination that a 1990 Mercedes-Benz 420SEL that was not originally manufactured to comply with all applicable Federal motor vehicle safety standards is eligible for importation into the United States because (1) it is substantially similar to a vehicle that was originally manufactured for importation into and sale in the United States and that was certified by its manufacturer as complying with the safety standards, and (2) it is capable of being readily modified to conform to the standards.

DATES: The closing date for comments on the petition is October 14, 1993.

ADDRESSES: Comments should refer to the docket number and notice number, and be submitted to: Docket Section, room 5109, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590. (Docket hours are from 9:30 a.m. to 4 p.m.].

FOR FURTHER INFORMATION CONTACT: Ted Bayler, Office of Vehicle Safety Compliance, NHTSA (202–366–5306).

SUPPLEMENTARY INFORMATION:

Background

Under section 108(c)(3)(A)(i) of the National Traffic and Motor Vehicle Safety Act (the Act), 15 U.S.C. 1397(c)(3)(A)(i), a motor vehicle that was not originally manufactured to conform to all applicable Federal motor vehicle safety standards shall be refused admission into the United States on and after January 31, 1990, unless NHTSA has determined that the motor vehicle is substantially similar to a motor vehicle originally manufactured for importation into and sale in the United States, certified under section 114 of the Act, and of the same model year as the model of the motor vehicle to be compared, and is capable of being readily modified to conform to all

applicable Federal motor vehicle safety standards.

Petitions for eligibility determinations may be submitted by either manufacturers or importers who have registered with NHTSA pursuant to 49 CFR part 592. As specified in 49 CFR 593.7, NHTSA publishes notice in the Federal Register of each petition that it receives, and affords interested persons an opportunity to comment on the petition. At the close of the comment period, NHTSA determines, on the basis of the petition and any comments that it has received, whether the vehicle is eligible for importation. The agency then publishes this determination in the Federal Register.

Champagne Imports Inc. of Lansdale, Pennsylvania (Registered Importer No. R–90–009) has petitioned NHTSA to determine whether 1990 Mercedes-Benz 420SEL (Model ID 126.035) passenger cars are eligible for importation into the United States. The vehicle which Champagne believes is substantially similar is the 1990 Mercedes-Benz 420SEL that Daimler Benz A.G. manufactured for importation into and sale in the United States, and certified as conforming to all applicable Federal motor vehicle safety standards.

The petitioner states that it carefully compared the non U.S.-certified 420SEL to its U.S.-certified counterpart, and found that two vehicles to be substantially similar with respect to compliance with most applicable Federal motor vehicle safety standards.

Champagne submitted information with its petition intended to demonstrate that the non-U.S.-certified 420SEL, an originally manufactured, conforms to many Federal motor vehicle safety standards in the same manner as its U.S.-certified counterpart, or is capable of being readily modified to conform to those standards.

Specifically, the petitioner claims that the non-U.S. certified 1990 model 420SEL is identical to the U.S.-certified 1990 model 420SEL with respect to compliance with Standard Nos. 102 *Transmission Shift Lever Sequence * * *.*, 103 *Defrosting and Defogging Systems*, 104 *Windshield Wiping and Washing System*, 105 *Hydraulic Brake Systems*, 106 *Brake Hoses*, 107 *Reflecting Surfaces*, 109 *New Pneumatic Tires*, 111 *Rearview Mirrors*, 113 *Hood Latch System*, 116 *Brake Fluid*, 124 *Accelerator Control Systems*, 201, *Occupant Protection in Interior Impact*, 202 *Head Restraints*, 203 *Impact Protection for the Driver From the Steering Control System*, 204 *Steering Control Rearward Displacement*, 205 *Glazing Materials*, 207 *Seating Systems*, 209 *Seat Belt Assemblies*, 210 *Seat Belt Assembly Anchorages*, 211 *Wheal Nuts, Wheel Discs and Hubcaps*, 212 *Windshield Retention*, 216 *Roof Crush Resistance*, 219 *Windshield Zone Intrusion*, and 302 *Flammability of Interior Materials*.

Petitioner also contends that the non-U.S.-certified 1990 model 420SEL is capable of being readily modified to meet the following standards, in the manner indicated:

Standard No. 101 *Controls and Displays:* (a) Substitution of a lens marked "Brake" for a lens with an ECE symbol on the brake failure indicator lamp; (b) installation of a seat belt warning lamp that displays the seat belt symbol; (c) recalibration of the speedometer/odometer from kilometers to miles per hour.

Standard No. 108 *Lamps, Reflective Devices and Associated Equipment:* (a) Installation of U.S.-model headlamp assemblies which incorporate sealed beam headlamps and front sidemarkers; (b) installation of U.S.-model taillamp assemblies which incorporate rear sidemarkers; (c) installation of a high mounted stop lamp.

Standard No. 110 *Tire Selection and Rims;* Installation of a tire information placard.

Standard No. 114 *Theft Protection:* Installation of a buzzer microswitch in the steering lock assembly, and a warning buzzer.

Standard No. 115 *Vehicle Identification Number:* Installation of a VIN plate that can be read from outside the left windshield pillar, and a VIN reference label on the edge of the door or latch post nearest the driver.

Standard No. 118 *Power-Operated Window Systems:* Rewiring of the power window system so that the window transport is inoperative when the ignition is turned off.

Standard No. 206 *Door Locks and Door Retention Components:* Replacement of the rear door locks and rear door locking buttons with U.S.-model parts.

Standard No. 208 *Occupant Crash Protection:* (a) Installation of either a U.S.-model seat belt in the driver's position or a belt webbing-actuated microswitch in the driver's seat belt retractor to activate the seat belt warning system; (b) installation of an ignition switch-actuated seat belt warning lamp and buzzer. The petitioner claims that the non-U.S.-certified 1990 model 420SEL is equipped with a passive restraint system consisting of an airbag, control module, and knee bolster, which have identical part numbers to those found on the U.S.-certified 1990 model 420SEL.

Standard No. 214 *Side Door Strength:* Installation of reinforcing beams.

Standard No. 301 *Fuel System Integrity:* Installation of a rollover valve in the fuel tank vent line between the fuel and the evaporative emissions collection canister.

Additionally, the petitioner states that the bumpers on the non-U.S.-certified 1990 model 420SEL must be reinforced to comply with the Bumper Standard found in 49 CFR part 581.

Interested persons are invited to submit comments on the petition described above. Comments should refer to the docket number and be submitted to: Docket Section, National Highway Traffic Safety Administration, room 5109, 400 Seventh Street SW., Washington, DC 20590. It is requested but not required that 10 copies be submitted.

All comments received before the close of business on the closing date indicated above will be considered, and will be available for examination in the docket at the above address both before and after that date. To the extent possible, comments filed after the closing date will also be considered. Notice of final action on the petition will be published in the Federal Register pursuant to the authority indicated below.

Authority: 15 U.S.C. 1397(c)(3)(A)(i)(I) and (C)(ii); 49 CFR 593.8; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on: September 8, 1993.

William A. Boehly,

Associate Administrator for Enforcement.

[FR Doc. 93–22408 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–59–M

Research and Special Programs Administration

International Standards on the Transport of Dangerous Goods by Air; Public Meeting

AGENCY: Research and Special Programs Administration (RSPA), Department of Transportation.

ACTION: Notice of public meeting.

SUMMARY: This notice is to advise persons that RSPA will conduct a public meeting to exchange views on proposals submitted to the fourteenth session of the International Civil Aviation Organization's (ICAO) Dangerous Goods Panel (DGP) to be held in Montreal, Canada on October 12–22, 1993.

DATES: October 6, 1993 at 9:30 a.m.

ADDRESSES: Department of Transportation, Nassif Building, room 8334, 400 Seventh Street SW., Washington, DC 20590–0001.

FOR FURTHER INFORMATION CONTACT: Frits Wybenga, (202) 366–0656, International Standards Coordinator for Hazardous Materials Safety, RSPA, Department of Transportation, Washington, DC 20590–0001.

SUPPLEMENTARY INFORMATION: This meeting will be held in preparation for the fourteenth session of the ICAO Dangerous Goods Panel Working Group. The primary purpose of the Panel meeting will be to discuss proposed amendments to the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (the Technical Instructions). The Panel will consider possible amendments to resolve problems encountered with the use of the Technical Instructions, and amendments to the Technical Instructions on the basis of revisions to the United Nations Recommendations on the Transport of Dangerous Goods (UN Recommendations).

The public is invited to attend without prior notification.

Documents

Documents submitted to the ICAO Dangerous Goods Panel may be reviewed between the hours of 8:30 a.m. and 5 p.m. in RSPA's Dockets Unit located in room 8419 of the Nassif Building, 400 Seventh Street, SW., Washington, DC 20590. Copies of documents may be obtained from RSPA for a nominal fee. A listing of these documents is available on the Hazardous Materials Information Exchange (HMIX), RSPA's computer bulletin board. Documents may be ordered by filling out an on-line request form on the HMIX or by contacting RSPA's Dockets Unit (202–366–4453). For more information on the use of the HMIX system, contact the HMIX information center; 1–800–PLANFOR (782–6367); in Illinois, 1–800–367–9592; Monday through Friday, 8:30 a.m. to 5 p.m. Central time.

After the meeting, a summary of the public meeting will also be available from the Hazardous Materials Advisory Council (HMAC), suite 250, 1110 Vermont Ave., NW., Washington, DC 20005; telephone number (202) 728–1460.

Issued in Washington, DC, on September 7, 1993.

Alan I. Roberts,

Associate Administrator for Hazardous Materials Safety.

[FR Doc. 93–22371 Filed 9–13–93; 8:45 am]

BILLING CODE 4910–60–M

DEPARTMENT OF THE TREASURY

Fiscal Service

[Dept. Circ. 570. 1993 Rev., Supp. No. 2]

Surety Companies Acceptable on Federal Bonds; Redomestication; United Pacific Insurance Co.

United Pacific Insurance Company has redomesticated from the state of Washington to the state of Pennsylvania effective December 20, 1992. The company was last listed as an acceptable surety on Federal bonds at 58 FR 35821, July 1, 1993.

Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570, 1993 revision, on page 35821 to reflect this change.

Questions concerning this notice may be directed to the Surety Bond Branch, Funds Management Division, Financial Management Service, Department of the Treasury, Washington, DC 20227, telephone (FTS/202) 874–6850.

Dated: September 9, 1993

Charles F. Schwan, III,

Director, Funds Management Division, Financial Management Service.

[FR Doc. 93–22406 Filed 9–13–93; 8:45 am]

BILLING CODE 4810–35–M

Office of the Comptroller of the Currency

Office of the Assistant Secretary for International Affairs

[Docket No. 93–14]

Foreign Treatment of United States Financial Institutions

AGENCY: Office of the Comptroller of the Currency and Office of the Assistant Secretary for International Affairs, U.S. Treasury.

ACTION: Notice of study and request for comments.

SUMMARY: Section 3602 of the Omnibus Trade and Competitiveness Act of 1988, Public Law 100–418, requires that a quadrennial report on the foreign treatment of United States financial institutions be submitted to Congress by the Department of the Treasury, working with other agencies. The second report is due no later than December 1, 1994. This report will describe, *inter alia*, "the extent to which foreign countries deny national treatment to United States banking organizations and securities companies." Public comment is requested on significant denials of national treatment to United States banking organizations and securities companies.

DATES: Comments must be delivered on or before October 29, 1993.

ADDRESSES: Comments regarding banking market activities should be directed to: Communications Division, Office of the Comptroller of the Currency, 250 E Street, SW., Washington, DC 20219; Attention: Docket No. 93–14. Comments will be available for inspection and photocopying at the same location.

Comments regarding securities market activities should be directed to: Office of International Banking and Portfolio Investment, Office of the Assistant Secretary for International Affairs, room 5323, U.S. Treasury Department, Washington, DC 20220; Attention: National Treatment Study Director (Securities).

These comments will be available for public inspection and photocopying during the hours that the Treasury Department Library is open (by appointment) to members of the public. The Treasury Library is located in room 5030, 1500 Pennsylvania Avenue, NW., Washington, DC 20220. Appointments can be made by calling the Treasury Library at (202) 622–0045.

FOR FURTHER INFORMATION CONTACT: C. Stewart Goddin, Study Director (Banking), or Howard Blacker, Senior International Adviser, International Banking and Finance, Office of the Comptroller of the Currency (202–874–4730) and James Ammerman, Study Director (Securities), Report on Foreign Treatment of United States Financial Institutions, Office of International Banking and Portfolio Investment, Treasury Department (202–622–0610).

SUPPLEMENTARY INFORMATION: In 1979, 1984, 1986, and 1990, Treasury, working with other interested departments and agencies, prepared reports on the treatment of U.S. commercial banks by foreign governments. (The 1986 and 1990 reports also covered securities markets.)

In 1988, Congress passed the Financial Reports Act as part of the Omnibus Trade and Competitiveness Act, which in section 3602 requires that Treasury, working with other agencies, report to the Congress on (1) the foreign countries from which foreign financial services institutions have entered into the business of providing financial services in the United States, (2) the kinds of financial services which are being offered, (3) the extent to which foreign countries deny national treatment to United States banking organizations and securities companies, and (4) the efforts undertaken by the

United States to eliminate such discrimination. The first such report, prepared in 1990, focused on those countries in which there are significant denials of national treatment that have an impact on United States financial firms. The second report will have a similar focus.

The policy of providing foreign financial firms an opportunity to compete on an equal basis with local domestic firms is known as "national treatment" or "equality of competitive opportunity."

Treasury would welcome specific comments on:

(a) Those markets which deny national treatment to U.S. banking organizations and securities companies in banking and/or securities activities;

(b) The laws, regulations, restrictions, or practices which result in the denial of equality of competitive opportunity;

(c) The seriousness of such obstacles to business operations;

(d) Significant denials in the provision of national treatment since June 30, 1990.

Dated: August 27, 1993.

Susan F. Krause,

Senior Deputy Comptroller for Bank Supervision Policy.

Dated: August 31, 1993.

Jeffrey R. Shafer,

Assistant Secretary for International Affairs.

[FR Doc. 93–22464 Filed 9–13–93; 8:45 am]

BILLING CODE 4810-25-M

UNITED STATES INFORMATION AGENCY

Culturally Significant Objects Imported for Exhibition

Determination

Notice is hereby given of the following determination: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985, 22 U.S.C. 2459), Executive Order 12047 of March 27, 1978 (43 FR 13359, March 29, 1978), and Delegation Order No. 85–5 of June 27, 1985 (50 FR 27393, July 2, 1985), I hereby determine that the objects to be included in the exhibit, "The Age of Baroque in Portugal" (see list [1]), imported from abroad for the temporary exhibition without profit within the United States, are of cultural significance. These objects are imported pursuant to a loan agreement with the foreign lenders. I also determine that the temporary exhibition or display of the listed exhibit objects at the National Gallery of Art, Washington, DC, from on or about November 7, 1993 to on or about February 6, 1994, is in the national interest.

Public Notice of this determination is ordered to be published in the **Federal Register.**

Dated: September 9, 1993.

R. Wallace Stuart,

Acting General Counsel.

[FR Doc. 93–22412 Filed 9–13–93; 8:45 am]

BILLING CODE 8230-01-M

[1] A copy of this may be obtained by contacting Mr. R. Wallace Stuart of the Office of the General Counsel of USIA. The telephone number is 202/619–5078, and the address is room 700, U.S. Information Agency, 301 Fourth Street SW., Washington, DC 20547.

Sunshine Act Meetings

Federal Register
Vol.58, No.176
Tuesday, September 14, 1993

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

TIME AND DATE: 12:00 noon, Monday, September 20, 1993.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets NW., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452–3204. You may call (202) 452–3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: September 10, 1993.

Jennifer J. Johnson,

Associate Secretary of the Board.

[FR Doc. 93–22521 Filed 9–10–93; 3:15 pm]

BILLING CODE 6210–01–P

NUCLEAR REGULATORY COMMISSION

DATE: Weeks of September 13, 20, 27, and October 4, 1993.

PLACE: Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Public and Closed.

MATTERS TO BE CONSIDERED:

Week of September 13

Thursday, September 16

11:30 a.m.
Affirmation/Discussion and Vote (Public Meeting)
a. Vermont Yankee Nuclear Power Corp.—Licensing Board Memorandum Regarding Termination of License Amendment Proceeding (LBP–93–16) (Tentative)
(Contact: Roland Frye, 301–504–3505)

Week of September 20—Tentative

Monday, September 20

10:00 a.m.
Briefing on Results of 2.206 Workshop (Public Meeting)
(Contact: Chip Cameron, 301–504–1642)
1:30 p.m.
Briefing on Status of AP600 and SBWR Thermal/Hydraulic Testing (Public Meeting)
(Contact: Brian Sheron, 301–492–3500)
3:00 p.m.
Briefing on NRC Reactor Inspection Program Assessment and Planned Improvements (Public Meeting)
(Contact: Anthony Gody, Sr., 301–492–1257)

Tuesday, September 21

10:30 a.m.
Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of September 27—Tentative

Thursday, September 30

2:00 p.m.
Briefing on Requirements for Storage and Transportation Casks (Public Meeting)
(Contact: Guy Arlotto, 301–504–3326)
3:30 p.m.
Affirmation/Discussion and Vote (Public Meeting) (if needed)

Week of October 4—Tentative

There are no meetings scheduled for the Week of October 4.

ADDITIONAL INFORMATION: By a vote of 4–0 on September 8, the Commission determined pursuant to U.S.C. 552b(e) and § 9.107(a) of the Commission's rules that "Affirmation of Sacramento Municipal Utility District (Rancho Seco Decommissioning Plan)" (Public Meeting) be held on September 10, and on less than one week's notice to the public.

Note—Affirmation sessions are initially scheduled and announced to the public on a time-reserved basis. Supplementary notice is provided in accordance with the Sunshine Act as specific items are identified and added to the meeting agenda. If there is no specific subject listed for affirmation, this means that no item has as yet been identified as requiring any Commission vote on this date.

To Verify the Status of Meeting Call (Recording)—(301) 504–1292.

CONTACT PERSON FOR MORE INFORMATION: William Hill (301 504–1661.

Andrew L. Bates,

Chief, Operations Branch, Office of the Secretary.

[FR Doc. 93–22513 Filed 9–10–93; 11:38 am]

BILLING CODE 7590–01–M

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Meeting Notice

TIME AND DATE: Executive Committee of the Board of Regents, 11:00 a.m., September 13, 1993.

PLACE: Uniformed Services University of the Health Sciences, Bethesda, Maryland.

STATUS: Open—under "Government in the Sunshine Act" (5 U.S.C. 552b(e)(3)).

MATTERS TO BE CONSIDERED: Agenda for the 1 November 1993 full board meeting.

CONTACT PERSON FOR MORE INFORMATION: George A. Drumbor, Executive Secretary of the Board of Regents, 301/295–3886.

Patricia L. Toppings,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93–22521 Filed 9–10–93; 11:39 am]

BILLING CODE 5000–04–M

UNITED STATES INSTITUTE OF PEACE

DATE AND TIME: Thursday, September 23, 1993, 9 a.m. to 5:30 p.m.

LOCATION: First Floor Conference Room, 1550 M Street NW., Washington, DC.

STATUS: (Open Session)—Portions may be closed pursuant to subsection (c) of section 552(b) of title 5, United States Code, as provided in subsection 1706(h)(3) of the United States Institute of Peace Act, Public Law 98–525.

AGENDA: Approval of Minutes of the Sixtieth Meeting of the Board of Directors; Chairman's Report; President's Report; General Issues; Budget Review; Deferred Grants; Introduction of Fellows; and Other Business.

CONTACT: Mr. Gregory McCarthy, Director, Public Affairs and Information, Telephone: (202) 457–1700.

Dated: September 10, 1993.

Bernice J. Carney,

Director, Office of Administration, United States Institute of Peace.

[FR Doc. 93–22534 Filed 9–10–93; 11:59 am]

BILLING CODE BAC 3155–01–M

federal register

Tuesday
September 14, 1993

Part II

Environmental Protection Agency

40 CFR Parts 148, et al.
Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soil; Proposed rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 148, 260, 261, 268 and 271

[EPA #530–7–93–011, FRL–4725–5]

RIN 2050–AD37

Land Disposal Restrictions for Newly Identified and Listed Hazardous Wastes and Hazardous Soil

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing treatment standards for the newly identified organic toxicity characteristic wastes (except those managed in Clean Water Act (CWA) systems, CWA-equivalent systems, or Class I Safe Drinking Water Act (SDWA) injection wells), and treatment standards for all newly listed coke by-product and chlorotoluene production wastes that must be met before these wastes are land disposed. EPA is also proposing to require ignitable characteristic wastes with a high total organic carbon (TOC) content and toxic characteristic pesticide wastes, that are being disposed in Class I nonhazardous waste injection wells, to either be injected into a well that is subject to a no-migration determination, or be treated to meet the LDR treatment standards prior to injection. These treatment standards and the dilution prohibitions for high TOC ignitables and pesticides are being proposed in order to comply with a proposed consent decree with the Environmental Defense Fund. This proposal also contains alternative standards for soil contaminated with prohibited hazardous wastes that will encourage use of noncombustion treatment technologies in treating hazardous soil. In addition, EPA is proposing several revisions to previously promulgated treatment standards and requirements in order to simplify the implementation of the land disposal restriction rules, including setting "universal treatment standards". Finally, EPA is proposing to modify the hazardous waste recycling regulations which will allow streamlined regulatory decisions to be made regarding the regulation of certain types of recycling activities.

DATES: Comments and data must be submitted on or before November 15, 1993.

ADDRESSES: The public must send an original and two copies of their written comments to EPA RCRA Docket (OS–305), U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460. Place the Docket Number F–92–CS2P–FFFFF on your comments. The RCRA Docket is located in room 2616 at the above address, and is open from 9 am to 4 pm Monday through Friday, except for Federal holidays. The public must make an appointment to review docket materials by calling (202) 260–9327. The public may copy a maximum of 100 pages from any regulatory document at no cost. Additional copies cost $.15 per page.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA Hotline at (800) 424–9346 (toll-free) or (703) 412–9810 locally. For technical information on treatment standards, contact the Waste Treatment Branch, Office of Solid Waste (OS–322W), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC. 20460, (703)308–8434. For technical information on capacity analyses, contact the Capacity Branch, Office of Solid Waste (OS–321W), (703)308–8440. For technical information on Hazardous Waste Recycling, contact the Regulation Development Branch, Office of Solid Waste (OS–332), (202)260–8551.

I. Background
A. Summary of the Statutory Requirements of the 1984 Hazardous and Solid Waste Amendments
B. Pollution Prevention Benefits
C. Relationship of Developing LDR Treatment Standards to Levels Being Considered in Hazardous Waste Identification Rule
II. Summary of Proposed Rule
A. Improvements to Existing LDR Program
B. Treatment Standards for Toxic Characteristic Wastes
C. Prohibition of Dilution of High TOC Ignitable and of TC Pesticide Wastes Injected into Class I Deep Wells
D. Treatment Standards for Newly Listed Wastes
E. Soil Contaminated with Hazardous Waste
F. Compliance Monitoring and Notification
G. Solicitation of Comment Regarding Exclusion of Hazardous Debris
H. Modifications to Hazardous Waste Recycling Regulations
III. Improvements to the Existing Land Disposal Restrictions Program
A. Proposed Universal Treatment Standards
1. Universal Standards for Organic Hazardous Constituents
a. Nonwastewaters
b. Wastewaters
c. Comments on the Advance Notice of Proposed Rulemaking
d. Other Revisions to Existing Treatment Standards
2. Universal Standards for Metal Hazardous Constituents
a. Nonwastewaters
b. Wastewaters
c. Comments on the Advance Notice of Proposed Rulemaking
d. Request for Data
3. Universal Standards for Cyanide
a. Wastewaters
b. Nonwastewaters
4. Universal Standards for Petroleum Refining Wastes
5. Universal Standards Will Not Apply to F024
B. Incorporation of Newly Listed Wastes into Lab Packs and Proposed Changes to Appendices
C. Proposed Changes in the LDR Program In Response to the LDR Roundtable
1. Background
2. Consolidated Treatment Table
3. Simplified LDR Notification Requirements
4. Demonstrating Acceptable Knowledge of One's Waste
a. Background
b. What Constitutes Acceptable Knowledge?
c. When Might Acceptable Knowledge be Used?
d. Why Provide Evidence to Support Acceptable Knowledge?
e. How Can A TSDF Verify Data Supplied by a Generator?
5. Advance Notice of Possible Changes to the LDR Program Resulting from the LDR Roundtable
a. Waste Code Carry Through
b. Use of Health-Based Levels Versus Technology-Based Levels in Establishing Treatment Standards
c. Inconsistency of Standards
d. Capacity-Related Issues
e. Generator Knowledge
f. Constituents
g. Detection Limits
h. Waste Analysis Plans (WAPs)
i. Paperwork
j. Complexity of the Regulations
IV. Treatment Standards for Toxicity Characteristic Waste
A. The Third Third Court Decision, The Emergency Interim Final Rule, and Their Applicability to TC Wastes
1. Background
2. Applicability of This Approach to TC Wastes and Hazardous Soil Covered by This Proposed Rule
3. Future Response to Issues Remanded by the Court
4. Request for Comment on Petition from Chemical Manufacturer's Association Regarding Deep Well Injection of Ignitable and Corrosive Characteristic Wastes
B. Background
1. Legal and Policy Background
2. Background on Toxicity Characteristic
C. Treatment Standards for New TC Organic Constituents
1. General Approach for Establishing Concentration-based Treatment Standards
a. Nonwastewaters
b. Wastewaters
2. Radioactive Mixed Waste
D. Treatment Standards for TC Pesticide Wastes (D012–D017)
1. Newly Identified Pesticide Nonwastewaters
2. Pesticide Wastewaters
E. Proposed Exemptions for *De Minimis* Losses of TC Wastes and for TC

Laboratory Wastes Discharged to CWA Wastewater Treatment
V. Deep Well Injection Issues
A. Prohibition of Dilution of High TOC Ignitable and of TC Pesticide Wastes Injected into Class I Deep Wells
B. Request for Comment on Petition from Chemical Manufacturer's Association Regarding Deep Well Injection of Ignitable and Corrosive Characteristic Wastes
VI. Treatment Standards for Newly Listed Wastes
A. Treatment Standards for Coke By-Product Production Wastes
1. Proposed Treatment Standards
2. Potential Future Revisions to Treatment Standards for Existing Coking Wastes K087, K060, and K035
B. Treatment Standards for Chlorotoluenes
VII. Treatment Standards for Hazardous Soils
A. Introduction
B. Applicability, Regulatory Status of Treated Soils, and Definitions
1. Applicability
2. Regulatory Status of Treated Soils
3. "Contained-in" Determinations
4. Definitions
a. Hazardous Soil
b. Constituents Subject to Treatment
c. Illegal Contamination of Soil
d. Nonanalyzable Constituents
C. Proposed Approaches for Establishing Treatment Standards for Hazardous Soils
1. Technology-Based Treatment Standards for Hazardous Soils
a. Range of Standards With A "Ceiling" One Order of Magnitude Above the Universal Standard, Provided 90% Treatment Occurs
b. Range of Standards With A "Ceiling" One Order of Magnitude Above the Universal Standard
c. Achieving 90% Treatment With No "Ceiling"
2. Explanation of Numeric Treatment Standards for Hazardous Soils
3. Treatment Standards for Residues from Soil Treatment
4. Treatability Variances
D. Contained-in Determinations
E. Soil Treatment Database
1. Treatment Technologies
2. Development of the Database
3. Analysis of the Database
a. Consideration of Innovative Technologies
b. Rationale for Not Using the "Traditional" BDAT Approach to Develop Hazardous Soil Treatment Standards
c. Graphical Analysis of Data
d. Transfer of Proposed Universal Standards to Constituents without Data
4. Request for Additional Data and Comment
F. Sampling and Analysis Protocols—Grab vs. Composite Samples
G. Relationship to Other Regulations and Programs
1. RCRA Land Disposal Restrictions Program
a. Existing LDR Treatment Standards
b. Soil Contaminated With Newly Listed Wastes Which Have Final Treatment Standards
c. Soil Contaminated With Newly Listed and Identified Wastes Which Have Proposed Treatment Standards
2. RCRA Corrective Action
3. Voluntary RCRA Cleanups
4. Phase I LDR Rule: Hazardous Debris
5. CERCLA as amended by SARA
6. Soil Contaminated by Underground Storage Tanks
7. Other Petroleum Contaminated Soil
8. Radioactive Mixed Wastes
a. Definition of Mixed Wastes
b. RCRA Requirements
9. Special Provisions for Soil Containing Asbestos
H. Related EPA Activities on Contaminated Media
1. Contaminated Media Cluster
2. Weathered Sludges
3. EPA Lead Strategy
4. Bioremediation
VIII. Compliance Monitoring and Notification
A. Compliance Monitoring
B. LDR Notification
1. Constituents To Be Included on the LDR Notification
2. Management in Subtitle C-Regulated Facilities
3. Potential Management of Decharacterized Wastes at a Subtitle D Waste Management Facility
IX. Further Solicitation of Comment Regarding Exclusion of Hazardous Debris that has been Treated by Immobilization Technologies
A. Background
B. Roundtable Discussion
C. EPA Investigations
D. Conclusions
X. Modifications to Hazardous Waste Recycling Regulations
A. Introduction
B. Modification of the Existing "Closed-Loop" Recycling Exclusion and Related Case-Specific Variance
1. Existing "Closed-Loop" Recycling Exclusion and Related Variance
2. K069 Wastes Recycled Back into the Secondary Process
3. Storage Prior to Recycling
XI. Implementation Issues
XII. Capacity Determinations
A. Capacity Analysis Results Summary
B. Analysis of Available Capacity
C. Surface Disposed Newly Identified and Listed Wastes
1. Required Capacity for Newly Identified TC Organics (D018–D043)
2. Required Capacity for Other Newly Listed Organic Wastes
a. Surface Disposed Coke By-Product Wastes
b. Surface Disposed Chlorinated Toluene Wastes
3. Newly Identified TC Wastes That Were Not Previously Hazardous by the Old EP Leaching Procedure
D. Required and Available Capacity for Newly Identified Wastes Mixed with Radioactive Components
E. Required and Available Capacity for High TOC Ignitable, TC Pesticide, and Newly Listed Wastes Injected into Class I Deep Wells
F. Required and Available Capacity for Hazardous Soil and Debris Contaminated with Newly Listed and Identified Wastes
1. Waste generation
a. Hazardous soil
b. Hazardous debris
2. Current management practices
3. Available capacity and capacity implications
a. Hazardous soil
b. Hazardous debris
XIII. State Authority
A. Applicability of Rules in Authorized States
B. Effect on State Authorization
XIV. Regulatory Requirements
A. Regulatory Impact Analysis Pursuant to Executive Order 12291
1. Methodology Section
a. Cost Methodology
b. Economic Impact Methodology
c. Benefits Methodology
2. Results Section
a. Cost Results
b. Economic Impact Results
c. Benefit Estimate
3. Regulatory Impact Analysis—Underground Injection Wastes
B. Regulatory Flexibility Analysis
C. Paperwork Reduction Act
Appendix A to the Preamble: Description of Hazardous Soil Treatment Technologies and Performance Standards

I. Background

A. Summary of the Statutory Requirements of the 1984 Hazardous and Solid Waste Amendments

The Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA), enacted on November 8, 1984, largely prohibit the land disposal of untreated hazardous wastes. Once a hazardous waste is prohibited from land disposal, the statute provides only two options: Meet the treatment standard for the waste prior to land disposal, or dispose of the waste in a land disposal unit that has been found to satisfy the statutory no migration test. The treatment standards EPA establishes may be expressed as either levels or methods, and must substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized. RCRA section 3004(m)(1). A no migration unit is one from which there will be no migration of hazardous constituents for as long as the waste remains hazardous. RCRA sections 3004(d), (e), (g)(5). For purposes of the restrictions, land disposal includes any placement of hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, or underground mine or cave. RCRA section 3004(k).

The land disposal restrictions are effective upon promulgation. RCRA section 3004(h)(1). However, the Administrator may grant a national capacity variance from the immediate effective date and establish a later effective date (not to exceed two years) based on the earliest date on which adequate alternative treatment, recovery, or disposal capacity which protects human health and the environment will be available. RCRA section 3004(h)(2). The Administrator may also grant a case-by-case extension of the effective date for up to one year, renewable once for up to one additional year, when an applicant successfully makes certain demonstrations. RCRA section 3004(h)(3). See 55 FR 22526 (June 1, 1990) for a more detailed discussion on national capacity variances and case-by-case extensions.

In addition, Congress prohibited storage of any waste which is prohibited from land disposal unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal. RCRA section 3004(j). For storage up to one year, EPA bears the burden of proving that such storage was not solely for the purpose of accumulation of quantities necessary to facilitate proper recovery, treatment or disposal. 40 CFR 268.50(b). For storage beyond one year, the burden of proof shifts to the generator or owner/operator of a treatment, storage or disposal facility to demonstrate that such storage was solely for the purpose of accumulation of quantities necessary to facilitate proper recovery, treatment or disposal. 40 CFR 268.50(c). The provision applies, of course, only to storage which is not also defined in section 3004(k) as land disposal.

EPA was required to promulgate land disposal prohibitions and treatment standards by May 8, 1990 for all wastes that were either listed or identified as hazardous at the time of the 1984 amendments, a task EPA completed within the statutory timeframes. RCRA sections 3004(d), (e), and (g). EPA is also required to promulgate prohibitions and treatment standards for wastes identified or listed as hazardous after the date of the 1984 amendments within six months after the listing or identification takes effect. RCRA section 3004(g)(4). The Agency did not meet this latter statutory deadline. As a result, a suit was filed by the Environmental Defense Fund (EDF) to compel agency action. In response to the suit, EPA filed with the District Court a proposed consent decree (not yet ratified by the Court) that would establish a schedule for adopting prohibitions and treatment standards for newly identified and listed wastes. (*EDF v. Reilly*, Civ. No. 89–0598, D.D.C.) Treatment standards proposed for the TC wastes (including TC soils) managed in non-CWA/non-CWA-equivalent/non-Class I SDWA well systems, and newly listed coke by-product and chlorotoluene production wastes are covered by this consent decree. The final treatment standards must be promulgated by July 1994.

None of the modifications to the existing land disposal restrictions rules proposed today are required by the EDF settlement. However, the Agency believes it important to review its regulations on a periodic basis and make changes, as appropriate, where such will improve or update our technical knowledge or improve or simplify the implementation of the program. In today's notice, EPA is proposing to modify the existing treatment standards for soil contaminated with prohibited hazardous waste(s), is proposing to develop a set of treatment standards (called universal standards) that would apply to most hazardous wastes, is proposing changes to the requirements for land disposal of lab packs containing prohibited hazardous wastes, and is proposing to modify the paperwork requirements so as to simplify the implementation of the regulations.

B. Pollution Prevention Benefits

EPA's progress over the years in improving environmental quality through its media-specific pollution control programs has been substantial. Over the past two decades, standard industrial practice for pollution control concentrated to a large extent on "end of pipe" treatment or land disposal of hazardous and non-hazardous wastes. However, EPA realizes that there are limits to how much environmental improvement can be achieved under these programs which emphasize management after pollutants have been generated. EPA believes that eliminating or reducing discharges and/or emissions to the environment through the implementation of cost-effective source reduction and environmentally sound recycling practices can provide additional environmental improvements. Examples of treatment standards proposed today that are based on the performance of a recovery technology are the universal standards for metals, which are based on the performance of high temperature metal recovery (HTMR). The Agency is requesting comment on whether other recovery technologies or source reduction activities are appropriate as the Best Demonstrated Available Technology (BDAT) for the wastes included in today's proposed rule.

The Agency has previously outlined the legal basis for waste minimization and source reduction as a potential type of LDR treatment standard, to be available as an optional choice for persons managing prohibited wastes. (See 56 FR 55162 (Oct. 24, 1991) and Supplemental Information Report pp. 30–31 prepared for the Notice of Data Availability (January 19, 1993).) Briefly, RCRA section 3004(m) requires the Agency to establish treatment standards so that short-term and long-term threats to human health and the environment are minimized. Waste minimization and source reduction potentially meet these criteria. They are a type of treatment, namely "a method, technique, or process * * * designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume." RCRA section 1004(34). Put another way, wastes ultimately generated will be less hazardous or reduced in volume by a process designed to change the composition of the hazardous waste being generated. Arguably, these process changes could apply to activities prior to the generation of the hazardous waste. Waste minimization and source reduction techniques also potentially further the ultimate statutory criteria of minimizing threats to human health and the environment. The endorsement of waste minimization and source reduction in the statute (see RCRA section 1003(6)) is a direct indication that these techniques further the statute's protectiveness objectives. See S. Rep. No. 284, 98th Cong. 1st Sess. 17 setting out the concept of a preferred waste management hierarchy in describing LDR requirements. It should also be noted that the D.C. Circuit has recently stated that one of the objectives of the section 3004 (m) treatment standards is to reduce the mass loading of hazardous constituents, *Chemical Waste Management v. EPA*, 976 F. 2d at 23–6, and this goal is perhaps best served by waste minimization and source reduction techniques.

This is not to say that there are no drawbacks to including these techniques as a type of section 3004(m) standard. The Agency would need to assess such factors as how these techniques affect: Production decisions; waste management costs and other market efficiencies; development of new

technologies; concentrations of hazardous constituents in the remaining residues; and, implementation difficulties noted in the Supplemental Information Report in making a decision to specify source reduction and waste minimization as a treatment standard. In addition, the Agency may also need to consider the applicability of the techniques to facilities which differ in processes used, size, age, and other factors.

To better understand these tradeoffs, the Agency solicited comments in the Supplemental Information Report (pp. 30–31) on allowing source reduction/waste minimization as an optional site-specific means of satisfying the LDR treatment standard. EPA is continuing to evaluate those comments, and requests further comment on this issue.

On May 18, 1993, the EPA Administrator announced new steps to protect public health and the environment by encouraging reduction in the amount of hazardous wastes generated in this country and strengthening federal controls governing hazardous waste incinerators and other combustion devices. One of those steps involved calling for a national review of the relative roles of waste combustion and waste reduction in hazardous waste management. The Agency is using today's proposed rule to solicit comment on the role of combustion and waste reduction in establishing BDAT. In particular, today's proposed rule specifies a series of new treatment standards that must be met before hazardous wastes are land disposed. These standards, which in many cases are based on combustion performance, specify numerical limits which allow the use of any treatment technology, and thereby recognizes the appropriateness of alternatives to combustion. The Agency specifically solicits comment and data on whether other treatment technologies, especially recycling technologies, can achieve these limits. If not, the Agency seeks comment and data on whether the levels should be modified so as to allow and encourage the use of non-combustion treatment technologies. As an example, the proposed standards for hazardous soils identify options which allow slightly higher levels of contaminants to remain in the treated soil so that innovative, non-combustion technologies may be used. In keeping with the call for a national review of the relative role of combustion, the Agency is soliciting comment on whether there are other actions that should be taken to achieve a reduction in waste generation, an increase in recycle/reuse, or greater use of non-combustion technologies. For example, land disposal restrictions have previously identified highly concentrated wastes that must be treated by recovery technologies. Are there contaminant levels for TC organics above which recovery should be required? With regard to non-combustion technologies, the Agency will attempt to encourage their use in the LDR program, to the extent that performance of such technologies satisfy the requirements of section 3004(m).

C. Relationship of Developing LDR Treatment Standards to Levels Being Considered in Hazardous Waste Identification Rule

A recurring debate throughout EPA's development of the land disposal restrictions has been whether the RCRA section 3004(m) treatment standards should be technology-based (i.e. based on performance of a treatment technology) or risk-based (i.e. based on assessment of risks to human health and the environment posed by the waste). By law, the treatment standards are to result in destruction, removal, or immobilization of hazardous constituents in the waste "so that short-term and long-term threats to human health and the environment are minimized." Section 3004(m). In making this determination, the Agency is directed to take into account the "long-term uncertainties associated with land disposal." Sections 3004 (d)(1)(A), (e)(1)(A) and (g)(5)(A). Technology-based standards achieve the objective of minimizing threats by eliminating as much of the uncertainty associated with disposal of hazardous waste as possible, and were upheld as legally permissible for this reason. *Hazardous Waste Treatment Council* v. *EPA*, 886 F. 2d 355, 361–64 (D.C. Cir. 1989), cert. denied 111 S. Ct. 139 (1990); see also 55 FR at 6642 (February 26, 1990). However, the court also held that treatment standards cannot be established "beyond the point at which there is no 'threat' to man or nature," *id.* at 362.

EPA has indicated that its ultimate policy preference is to establish risk-based levels that represent minimize threat levels and so cap the extent of hazardous waste treatment. 55 FR at 6641. The difficulties involved in this task, however, are formidable and very controversial. The technical issues include assessing exposure pathways other than migration to ground water, taking environmental risk into account, and developing adequate toxicological information for the hazardous constituents controlled by the hazardous waste program. 55 FR at 6642.

EPA is currently working on a rulemaking that will define hazardous constituent concentration levels below which a waste is no longer considered "hazardous." Discussions concerning these levels are taking place in the context of the recently chartered Federal Advisory Committee on the Hazardous Waste Identification Rule (HWIR). The Committee chose to initially discuss how to provide greater flexibility for the remediation of contamination at hazardous waste sites. It has also begun discussions by focusing on concentrations below which waste mixtures and treatment residuals would no longer be subject to the hazardous waste regulations ("exit" criteria), while also discussing whether there is a regulatory approach to relatively quickly bring under regulation clearly hazardous waste not now controlled by the hazardous waste regulations (an "entry" rule). To help address the uncertainties of assessing multiple exposure pathways, the Agency also has initiated research to examine exposure of humans and the environment to hazardous constituents through a large number and variety of pathways.

Because current technology-based standards (like those in today's proposal) impose substantial costs, EPA has asked the Committee to consider ways to reduce the costs of managing wastes and remediating sites under RCRA. In addition, EPA will specifically ask the Committee to consider by the end of December, whether risk-based exit criteria could also serve as minimize threat levels to potentially cap treatment standards for the land disposal restrictions. If the Committee recommends that the risk-based exit criteria approach being developed could serve as caps on BDAT treatment standards, EPA will prepare a supplemental notice to the current proposal or otherwise expeditiously propose such an approach as a complement to the current technology-based standards.

II. Summary of Proposed Rule

On October 24, 1991, EPA published an advance notice of proposed rulemaking (ANPRM) to solicit comment on many aspects of what is included in today's proposed rule. Comments and data received in response to the ANPRM have been incorporated into this package.

A. Improvements to Existing LDR Program

The land disposal restrictions (LDR) program has been in place for over seven years. Because the Agency was involved with promulgating treatment

standards in time to meet statutory deadlines, the program was not developed under optimum conditions. As a result, implementation of the LDR program may be quite complex. The Agency is considering a number of changes that could be made to the LDR program to simplify its implementation, without sacrificing protection of human health and the environment. In particular, the Agency is proposing in this notice to replace the existing constituent-specific/waste-specific standards for many hazardous wastes with a common set of treatment standards, referred to throughout this proposal as universal standards. Today's notice also proposes to simplify the requirements for lab packs containing hazardous wastes, and to eliminate some of the data items required on LDR notifications. Additionally, a clarifying chart of paperwork requirements and a discussion of what constitutes "acceptable knowledge of the waste" are included.

B. Treatment Standards for Toxic Characteristic Wastes

On March 29, 1990, EPA promulgated additional organic constituents and levels at which a waste is considered hazardous based on the characteristic of toxicity (55 FR 11798). Because these wastes were identified as hazardous after the enactment date of HSWA in 1984, they are referred to under the LDR program as "newly identified wastes". Included are wastes identified with the codes D018 through D043 based on the toxicity characteristic leaching procedure (TCLP), i.e., TC wastes. EPA is proposing treatment standards for each of these constituents as part of today's rule. In addition, because wastes exhibiting the toxicity characteristic can also contain treatable levels of other hazardous constituents, EPA is also proposing treatment standards for such constituents, as well as rules on testing and monitoring such constituents. These treatment standards and rules are necessary to implement the court's opinion in *Chemical Waste Management* v. *EPA*, 976 F. 2d 2, 17–8 (D.C. Cir. 1992), cert denied U.S. (April 26, 1993).

C. Prohibition of Dilution of High TOC Ignitable and of TC Pesticide Wastes Injected into Class I Deep Wells

In its September 25, 1992 ruling on the Third Third LDR Rule, the D.C. Circuit Court remanded the Agency's determination in that rule that allowed dilution to remove characteristics of hazardous waste that are injected into Class I nonhazardous deep injection wells regulated by the Safe Drinking Water Act. The Agency is continuing to develop a response to the court ruling. As part of that response, EPA is today proposing to prohibit dilution of two types of characteristic wastes disposed in Class I wells: High TOC ignitable liquids (D001) and halogenated pesticide wastes that exhibit the toxicity characteristic (D012–D017). The Agency is proposing this prohibition because in each of the two cases, treatment is the preferred management option; the organics in D001 high TOC liquids can be reused, and D012–D017 pesticide wastes contain particularly toxic constituents. The Agency is therefore proposing to require that these wastes be treated before injection in a Class I well, or that they be injected into a no-migration well.

D. Treatment Standards for Newly Listed Wastes

EPA has promulgated a number of hazardous waste listings since the enactment of HSWA in 1984, referred to as "newly listed wastes" under the LDR program. This proposed rule describes the treatment and/or recycling technologies identified as BDAT for several of these newly listed wastes, and proposes treatment standards based on these BDATs. Newly listed wastes included in today's proposal are K141–K145, K147–K148, and K149–K151 (coke by-product production wastes and chlorotoluene wastes) (see 40 CFR 261.32.)

E. Soil Contaminated with Hazardous Waste

This notice also proposes new alternative treatment standards for hazardous constituents when they are contaminating soil (i.e., hazardous soil). The Agency is proposing these alternatives in order to consider a full range of innovative technologies that are available to treat such hazardous soil. In particular, under the current regulations and the "contained-in" policy, soil contaminated with hazardous waste is regulated to the same degree as the contaminating hazardous waste itself, until such contamination can be separated from the soil matrix so that it no longer "contains" hazardous constituents. The numerical treatment standards for many of these hazardous wastes when they are not found in the soil matrix is based on the performance of incineration, a technology not uniformly appropriate for hazardous soil, because of the low concentrations of hazardous constituents often found in soil. Rather, other technologies may be more appropriate for the treatment of lightly contaminated hazardous soils. The Agency, therefore, is proposing these alternative treatment standards for hazardous soil based on performance of technologies more appropriate for soil treatment. In order to comply with the LDR's, hazardous soil would have to be treated either to meet the standards for the hazardous waste contaminating the soil, or the alternative treatment standards proposed in this notice.

The Agency is proposing three different approaches to develop alternative technology-based treatment standards for soils. Under these approaches, the universal treatment standards (discussed in section III.A of this preamble) are proposed for soil as "base" standards. Each approach allows for treatment to levels above the universal standards and differ primarily in the extent of treatment required.

Under the first approach, the Agency is proposing a range of standards with a "ceiling" one order of magnitude above the universal standard, provided 90% treatment of each constituent subject to treatment is achieved. The second approach is a variation of the first, in that the Agency is proposing a range of standards with a "ceiling" one order of magnitude above the universal standard; however, there is no requirement that 90% reduction occur. The third approach proposes an unlimited range of values above the universal standard provided 90% treatment is attained (i.e., there would be no "ceiling" value) unless 90% treatment would treat the waste to a level below the universal treatment standards. If such a level would be achieved through 90% treatment, the universal treatment standards would be met.

The Agency is proposing that these approaches would apply to all hazardous soils regardless of the type of contaminating hazardous waste. That is to say, the proposed approaches would apply to soils contaminated with listed hazardous wastes, soils displaying the toxicity characteristic, and soils displaying the characteristic of ignitability, corrosivity, or reactivity.

F. Compliance Monitoring and Notification

In the May 24, 1993 interim final rule (58 FR 29872), the Agency adopted an approach that allowed facilities handling ignitable or corrosive waste to monitor for additional hazardous constituents "reasonably expected to be present". The determination of "reasonably expected to be present" could be based on knowledge of the raw materials, process, and potential reaction products, or the results of a one-time analysis for the entire list of constituents subject to treatment. The

Agency noted that this approach would not necessarily be taken in the future when the remanded rules were addressed. The Agency is therefore taking comments in today's proposed rule on options for modifying this approach.

EPA is also soliciting comment on how to limit monitoring for those constituents subject to treatment in TC wastes and hazardous soil in subtitle C-regulated facilities, in subtitle D facilities, and at CERCLA or RCRA remediation sites.

G. Solicitation of Comments Regarding Exclusion of Hazardous Debris

In this proposal, the Agency is soliciting data to demonstrate whether immobilized hazardous debris (if treated properly) should be excluded from subtitle C control. This proposal describes a number of activities related to this issue which the Agency undertook after the promulgation of the land disposal restrictions for hazardous debris on August 18, 1992.

H. Modifications to Hazardous Waste Recycling Regulations

The Agency is also proposing modifications to the current regulatory framework to the definition of solid waste that, if promulgated, would modify the regulation of hazardous waste recycling by providing streamlined mechanisms that would encourage environmentally protective recycling of specific wastestreams. The Agency is looking at the definition of solid waste in a broader sense, and plans to consider broader changes at a later date. Today's modifications will, however, allow environmentally beneficial recycling operations to continue without the regulatory impediments imposed by full RCRA subtitle C requirements. In turn, this will allow EPA and the states to streamline their efforts and better focus on operations that are part of the nation's waste disposal problem, rather than on those that are not, while the Agency continues to look at the overall definition.

These modifications will broaden the § 261.2(e)(1)(iii) "closed-loop" recycling exclusion from the definition of solid waste such that the residues of a secondary process (in addition to residues of a primary process, as currently allowed) are excluded from being a solid waste if they are reinserted into the process without prior reclamation (and also similarly broaden the related § 260.30(b) variance for materials that are reclaimed prior to reinsertion).

The proposed modifications are based, in part, on two relatively recent Court opinions (*American Petroleum Institute* v. *EPA*, 906 F. 2d 726 (D.C. Cir. 1990) (API) and *American Mining Congress* v. *EPA*, 907 F. 2d 1179 (D.C. Cir. 1990) (AMC II)) which indicate that the Agency has some discretion to consider the manner in which a secondary material is managed in determining RCRA jurisdiction (i.e., RCRA jurisdiction may be determined, at least in part, by consideration of whether the material is part of the waste management problem, as indicated by the potential for the material to pose a hazard to human health and the environment when recycled).

III. Improvements to the Existing Land Disposal Restrictions Program

A. Proposed Universal Treatment Standards

Facilities that treat and land dispose hazardous wastes typically must comply with the LDR treatment standards that have been established for many different listed and characteristic hazardous waste codes. In some cases, a constituent regulated under the treatment standard for one waste may also be a constituent regulated under the treatment standard for another waste. These two treatment standards may be different concentration levels. Such differences in concentration limits for the same constituent may cause confusion to the regulated community and to enforcement personnel.

In an effort to simplify and streamline the LDR program, the Agency investigated the possibility of establishing a concentration limit for each constituent that would be its treatment standard, regardless of the hazardous waste in which it was present. This concept of establishing consistent concentration limits on a constituent-by-constituent basis is being referred to as establishing "universal" treatment standards.

Universal treatment standards are being proposed in this notice for organic and metal constituents—one set for wastewaters and a different set for nonwastewaters—that would replace most existing limits in previously promulgated treatment standards for listed hazardous wastes. These proposed universal standards would not apply, however, to wastes for which the Agency has previously promulgated treatment standards expressed as a required method of treatment (see 40 CFR 268.42).

EPA is also proposing that the universal treatment standards would *not* apply to F024, for reasons that are discussed later in this section of the preamble. EPA requests comment on whether the universal treatment standards should also apply to F024. EPA also requests comment on whether there are other wastes or groups of waste for which the universal treatment standards should not apply.

The primary goal of establishing universal standards is to provide technically consistent and equitable standards that simplify owner/operator compliance, as well as enforcement and compliance monitoring efforts. Another potential advantage is that the universal standards would provide the regulated community with consistent constituent-by-constituent concentration goals for which the facility can direct waste minimization investigations. Furthermore, universal standards could serve as a performance benchmark for developing alternative treatment technologies.

The universal standards will be particularly helpful in treating and measuring compliance when several listed wastes have been mixed together that contain the same constituent of concern, but under the present system have different concentration limits. Wastes that are amenable to treatment by the same technologies are often appropriately commingled prior to treatment and recovery. Since under universal standards the constituent of concern would have the same concentration limit no matter what listed waste code it is in, the need to determine and achieve different concentration limits would be eliminated. The development of universal standards is not intended, however, to modify current restrictions on the commingling of incompatible wastes, impermissible switching of treatability groups, or impermissible dilution. The Agency is not reopening these issues for comment.

Universal treatment standards would also provide EPA with a mechanism to streamline the development of treatment standards for future hazardous waste listings. In most cases, it could be assumed that the constituents in newly listed wastes would be subject to the universal standards. Facilities could then challenge these assumptions (if warranted) during the rulemaking for the waste listing. EPA solicits comment on the advantages and disadvantages of developing universal treatment standards.

EPA is proposing universal standards for over 200 constituents. This accounts for all of the organics and metals that can be analyzed consistently in treatment residuals and that have been regulated in previously-promulgated

treatment standards. The Agency is proposing that the generator or owner/operator would not have to analyze for all constituents in the BDAT list (See the BDAT list at "Guidebook for Quality Assurance/Quality Control Procedures for Submission of Data for the Land Disposal Restrictions Program," July 3, 1991, p. 8–15 in the docket for this rule.) Rather, it would only be necessary to analyze for those regulated constituents in the listed wastes that are being treated.

1. Universal Standards for Organic Hazardous Constituents

a. Nonwastewaters. The majority of the existing nonwastewater treatment standards for organics have been established based on data from some form of thermal destruction, typically incineration. This is due to the Agency's decision to establish methods of treatment instead of risk-based levels and the ability of thermal devices to destroy organics to levels at or near the detection limit (as measured in the ash). In fact, incineration has been determined to be BDAT for most of the wastes containing organics (i.e., most of the treatment standards for organic hazardous constituents are based on the performance of incineration.) Nevertheless, the Agency believes that other treatment technologies, including lower cost innovative technologies, can also meet these standards. In fact, the Agency has data on the treatment of these constituents by innovative technologies (technologies other than incineration, such as solvent extraction, thermal desorption) that support the levels being proposed today. However, the Agency specifically solicits comment as to what extent innovative technologies can meet the standards proposed today.

In establishing treatment standards in the First, Second and Third Third rulemakings, the Agency had varying amounts of treatment data; many of the existing nonwastewater treatment standards were established based on the transfer of thermal treatment data from similar waste. Because the number of organic constituents in existing treatment standards is so large, EPA arranged them into thirteen treatability groups based on similarities in chemistry, structure, usage, ease of treatability, detection limits, and waste generation patterns (many of these groups are based on treatability groups used to establish treatment standards in previous rulemakings.) These treatability groups are Chlorinated Volatiles, Organo-Bromines, Chlorobenzenes, PCBs and Dioxins, Chlorinated Pesticides, Chlorinated Phenolics and Derivatives, Nonchlorinated Phenolics, Phthalates, Oxygenated Hydrocarbons, Polynuclear Aromatic Hydrocarbons, Aromatic Hydrocarbons, Organo-Sulfur Pesticides, and Organo-Nitrogen Compounds.

The Agency examined all treatment data available for each treatability group. Because the constituents within each treatability group are generally treated by the same technology, patterns of similar treatment levels exist within each group. In some cases, however, there are constituents in the group that are either hard to treat or hard to detect. These are the constituents that tend to have higher treatment standards. The data used to establish the treatment levels were reviewed and the process refined, to ensure that the data that was used was the most appropriate for each constituent. Treatment performance data for wastes for which universal standards will not apply were removed from consideration. (See later section on waste codes for which universal standards will not apply.)

The treatment performance data were further examined to determine trends within each treatability group. These trends might have included transfers of data from specific constituents, similar treatment standards, and use of performance data from the same treatment test. In general, the treatment standards for the constituents within a treatability group were comparable in magnitude. Numbers higher than the majority of treatment standards normally indicated a waste harder to treat or analyze.

Universal standards were chosen on a constituent-by-constituent basis and are included in a table later in this section. The derivation of these standards is based on a number of factors. The Agency first considered performance data (i.e., the matrix spike recovery data and detection limit) transferred from the same constituent. If this was not possible, the Agency considered performance data (i.e., the matrix spike recovery data) from a constituent in the same treatability group. The Agency also preferred to use a matrix spike recovery value based on actual recovery rather than an average value. In addition, the detection limit data for the constituent were reviewed to see if the detection limit was reasonable and if it could be reasonably expected to be achieved—that is, after the universal standard was determined for a constituent, the value was compared to the detection limits used in the development of the existing treatment standards to see if other waste codes could be treated to meet the universal standard. (See the background document for universal standards for more information on the development of these standards.)

In the Third Third rulemaking, the Agency received comment that some of the treatment standards being promulgated at that time were too low to detect. In response, after reviewing the submitted data, the Agency decided as an interim measure that if incineration (the technology on which the standards in question were based) was used to achieve a "non-detect" level, and if that "non-detect" level was within an order of magnitude of the promulgated standard, it was considered to be in compliance with the treatment standard (see 40 CFR 268.43(c).) Because EPA is proposing that those treatment standards promulgated in the Third Third rule be revised based on the universal standards, the Agency is soliciting comment on the continued need for such a policy. An alternative would be if the facility measures compliance with the universal standards and detects at least one constituent at or below the universal standard within each treatability group, then any non-detects above the universal standards within that treatability group would be considered to be in compliance. In such cases, waste analysis plans could be modified to reflect monitoring for certain constituents within each treatability group that do not have detection level problems.

b. Wastewaters. The proposed universal standards for wastewaters are taken primarily from the treatment standards promulgated for F039—multi-source leachate, and are included in a table later in this section. These existing treatment standards for organic constituents in wastewaters were based on a variety of conventional wastewater treatment technologies. Information about these treatment standards can be found in the background document in the RCRA docket.

c. Comments on the Advance Notice of Proposed Rulemaking. Most commenters to the Advance Notice of Proposed Rulemaking supported the establishment of universal standards for organic wastes. However, several disagreed with the approach. In particular, several commenters were concerned that they would have to analyze the entire BDAT list for each waste to measure compliance with the universal standards. As indicated earlier in this section, a treater would only have to analyze for those constituents regulated in the listed wastes being treated.

Several commenters supported the idea of universal treatment standards for simplicity, but thought that these numbers should be health-based and not below the TC levels. EPA's historic position, echoed by the D.C. Circuit in *HWTC* v. *EPA*, 886 F.2d 355, 362 (D.C. Cir. 1989) cert. denied 111 S. Ct. 139 (1990), is that characteristic levels for toxic wastes do not minimize the threats these wastes may pose. EPA is considering whether to establish risk-based levels as part of the Hazardous Waste Identification Rule (HWIR) currently being developed. Depending on how this effort evolves and based on available data, these levels may be equal, lower, or higher than LDR treatment levels.

A few commenters argued that they did not like the idea of universal treatment standards for organics. One commenter stated that in order for EPA to establish universal standards, the Agency would have to adopt the highest treatment standard for any constituent to ensure that all wastes can be treated to conform with the standard. The commenter argued that there is a range of variation among specific standards for identical organic constituents in different wastes. The commenter indicated that the main reasons for these differences are the wide variety of matrices treated.

The Agency does not believe that the variety in organic treatment standards is the result of treating different matrices. The variety results chiefly from different detection limits used in developing the standards. For example, analytical laboratories have different levels of accuracy for reporting detection limits, and most of the organic treatment standards are based on detection limits. Furthermore, when developing universal standards, the Agency reviewed all treatment data to assure that the standard could be met by well-operated, well-designed treatment units appropriate for these types of wastes.

Several commenters stated that universal treatment standards were not supported by available treatment data for organics. The Agency disagrees with this comment. In fact, the organic universal standards were developed using only available treatment data.

In summary, EPA believes it is appropriate to develop universal treatment standards and that for nonwastewaters to base the standards on incineration because it is a matrix-independent technology that reduces the amount of material ultimately sent to land disposal and it destroys the organic hazardous constituents. However, the proposed levels would not be technology forcing since available data indicate that, depending on the concentration of the constituent, other technologies, including innovative technologies (i.e., solvent extraction, thermal desorption) can achieve the proposed universal treatment standards in the wide variety of nonwastewater matrices. The Agency specifically solicits comment on this point.

d. Other Revisions to Existing Treatment Standards. The Agency is today soliciting comment on whether we should regulate individual aroclors, or total PCBs. EPA is proposing as alternatives two different sets of standards for both wastewater and nonwastewater forms of PCBs. In one set, the treatment standard is a single number representing the sum of all individual aroclor concentrations. In the other set, each aroclor has its individual treatment standard. Total PCBs, which include seven aroclors, represent hundreds of isomers of polychlorinated biphenyls. This approach would be consistent with the regulations of other EPA offices, such as those promulgated pursuant to the Toxic Substance Control Act (TSCA). This approach would also eliminate any analytical difficulties in quantifying each of the individual aroclors. The current regulations addressing individual aroclors require a pattern recognition of the gas chromatograph, which is often difficult to differentiate. Furthermore, regulation of individual aroclors may be difficult for wastes subject to degradation or treatment. EPA would recommend SW–846 methods 8080 or 8081 (which use a gas chromatograph/electron capture detector) for measurement of total PCBs.

The Agency is proposing to regulate the sum of several constituents for xylenes in both wastewaters and nonwastewaters. The three xylenes included on the BDAT list of hazardous constituents are ortho-, meta-, and para-xylene. These constituents are proposed to be regulated as a sum in the universal standards because meta- and para-isomers co-elute in gas chromatograph analysis. Two methods exist in SW–846 for the measurement of total xylenes: 8020 and 8240. Method 8020 detects xylenes using a photoionization detector and 8240 uses a mass spectrometer. Total xylenes concentration is determined from the addition of the ortho-xylene concentration and the meta-para-xylene concentration.

Additionally, EPA is proposing to regulate two pairs of analytically problematic constituents, benzo(b)fluoranthene/benzo(k)fluoranthene and diphenylamine/diphenylnitrosamine with a single wastewater and nonwastewater number for each pair

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR ORGANICS

[Nonwastewaters]

Regulated constituent	Maximum for any grab sample total composition (mg/kg)
Acetone	160
Acetophenone	9.7
Acenaphthalene	3.4
Acenapthene	3.4
2-Acetylaminofluorene	140
Aldrin	0.066
Aniline	14
Anthracene	3.4
Aroclor 1016	0.92
Aroclor 1221	0.92
Aroclor 1232	0.92
Aroclor 1242	0.92
Aroclor 1248	0.92
Aroclor 1254	1.8
Aroclor 1260	1.8
Acrylonitrile	84
alpha-BHC	0.066
beta-BHC	0.066
delta-BHC	0.066
gamma-BHC	0.066
Benzal chloride	6.0
Benzene	10
Benz(a)anthracene	3.4
Benzo(a)pyrene	3.4
Benzo(b)fluoranthene	16.8
Benzo(k)fluoranthene	16.8
Benzo(g,h,i)perylene	1.8
Bis-(2-ethylhexyl) phthalate	28
Bromodichloromethane	15
Bromomethane (methyl bromide)	15
4-Bromophenyl phenyl ether	15
n-Butanol	2.6
Butyl benzyl phthalate	28
2-sec-Butyl-4,6-dinitrophenol	2.5
Carbon disulfide	4.81
Carbon tetrachloride	6.0
Chlordane	0.26
p-Chloroaniline	16
Chlorobenzene	6.0
Chlorodibromomethane	15
Chloroethane	6.0
bis-(2-Chloroethoxy) methane	7.2
bis-(2-Chloroethyl) ether	6.0
bis-(2-Chloroisopropyl) ether	7.2
p-Chloro-m-cresol	14
Chloroform	6.0
Chloromethane	30
2-Chloronaphthalene	5.6
2-Chlorophenol	5.7
3-Chloropropene	30
Chrysene	3.4
Cresol(m- and p-)	3.2
o-Cresol	5.6
Cyclohexanone	0.75
Dibenz(a,h)-anthracene	8.2
1,2-Dibromo-3-Chloropropane	15
1,2-Dibromoethane (Ethylene dibromide)	15
Dibromomethane	15
m-Dichlorobenzene	6.0
o-Dichlorobenzene	6.0
p-Dichlorobenzene	6.0
1,1-Dichloroethane	6.0

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR ORGANICS—Continued

[Nonwastewaters]

Regulated constituent	Maximum for any grab sample: total composition (mg/kg)
1,2-Dichloroethane	6.0
2,4-Dichlorophenol	14
2,6-Dichlorophenol	14
2,4-Dichlorophenoxyacetic acid	10
o,p'-DDD	0.087
p,p'-DDD	0.087
o,p'-DDE	0.087
p,p'-DDE	0.087
o,p'-DDT	0.087
p,p'-DDT	0.087
Dichlorodifluoromethane	7.2
1,1-Dichloroethylene	6.0
trans-1,2-Dichloroethylene	30
1,2-Dichloropropane	18
cis-1,3-Dichloropropene	18
trans-1,3-Dichloropropene	18
Dieldrin	0.13
Diethyl phthalate	28
2,4-Dimethyl phenol	14
Dimethyl phthalate	28
1,4-Dinitrobenzene	2.3
4,6-Dinitro-o-cresol	160
2,4-Dinitrophenol	160
2,4-Dinitrotoluene	140
2,6-Dinitrotoluene	28
Di-n-butyl phthalate	28
Di-n-octyl phthalate	28
Di-n-propylnitrosoamine	14
1,4-Dioxane	170
Diphenylamine	[1] 13
Diphenylnitrosamine	[1] 13
Disulfoton	6.2
Endosulfan I	0.066
Endosulfan II	0.13
Endosulfan sulfate	0.13
Endrin	0.13
Endrin aldehyde	0.13
Ethyl acetate	33
Ethyl benzene	10
Ethyl ether	160
Ethyl methacrylate	160
Famphur	15
Fluoranthene	3.4
Fluorene	3.4
Heptachlor	0.066
Heptachlor epoxide	0.066
Hexachlorobenzene	10
Hexachlorobutadiene	5.6
Hexachlorocyclopentadiene	2.4
Hexachlorodibenzo-furans	0.001
Hexachlorodibenzo-p-dioxins	0.001
Hexachloroethane	30
Hexachloropropene	30
Ideno(1,2,3-cd)pyrene	3.4
Iodomethane	65
Isobutanol	170
Isodrin	0.066
Isosafrole	2.6
Kepone	0.13
Methacrylonitrile	84
Methanol	0.75
Methapyrilene	1.5

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR ORGANICS—Continued

[Nonwastewaters]

Regulated constituent	Maximum for any grab sample: total composition (mg/kg)
Methoxychlor	0.18
3-Methylcholanthrene	15
4,4-Methylene-bis-(2-chloroaniline)	30
Methylene Chloride	30
Methyl ethyl ketone	36
Methyl isobutyl ketone	33
Methyl methacrylate	160
Methyl Parathion	4.6
Naphthalene	5.6
o-Nitroaniline	14
p-Nitroaniline	28
Nitrobenzene	14
5-Nitro-o-toluidine	28
o-Nitrophenol	13
p-Nitrophenol	29
N-Nitrosodiethylamine	28
N-Nitroso-di-n-butlyamine	17
N-Nitrosomethylethylamine	2.3
N-Nitrosomorpholine	2.3
N-Nitrosopipendine	35
N-Nitrosopyrrolidine	35
Parathion	4.6
Pentachlorobenzene	10
Pentachlorodibenzo-furans	0.001
Pentachlorodibenzo-p-dioxins	0.001
Pentachloroethane	6
Pentachloronitrobenzene	4.8
Pentachlorophenol	7.4
Phenacetin	16
Phenanthrene	5.6
Phenol	6.2
Phorate	4.6
Phthalic anhydride	28
Propanenitrile	360
Pronamide	1.5
Pyrene	8.2
Pyridine	16
Safrole	22
Silvex (2,4,5-TP)	7.9
2,4,5-T	7.9
1,2,4,5-Tetrachlorobenzene	14
Tetrachlorodibenzo-furans	0.001
Tetrachlorodibenzo-p-dioxins	0.001
1,1,1,2-Tetrachloroethane	6.0
1,1,2,2-Tetrachloroethane	6.0
Tetrachloroethylene	6.0
2,3,4,6-Tetrachlorophenol	7.4
Toluene	10
Toxaphene	2.6
1,2,4-Trichlorobenzene	19
1,1,1-Trichloroethane	6.0
1,1,2-Trichloroethane	6.0
Trichloroethylene	6.0
2,4,5-Trichlorophenol	7.4
2,4,6-Trichlorophenol	7.4
1,2,3-Trichloropropane	30
1,1,2-Trichloro-1,2,2-trifluoroethane	30
Vinyl chloride	6.0
Xylene(s)	[3] 30

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR ORGANICS—Continued

[Nonwastewaters]

Regulated constituent	Maximum for any grab sample: total composition (mg/kg)
Total PCBs	10

[1] This standard represents the sum of the concentrations for each of this pair of constituents.

[2] This standard represents the sum of the concentrations for each of this pair of constituents.

[3] This standard represents the sum of the concentrations of m-xylene, o-xylene, and p-xylene.

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR ORGANICS

[Wastewaters]

Regulated constituents	Maximum for any 24 hr. composite: total composition (mg/l)
Acetone	0.28
Acenaphthalene	0.059
Acenaphthene	0.059
Acetonitrile	0.17
Acrolein	0.29
Acetophenone	0.010
2-Acetylaminofluorene	0.059
Acrylonitrile	0.24
Aldrin	0.021
4-Aminobiphenyl	0.13
Aniline	0.81
Anthracene	0.059
Aramite	0.36
Aroclor 1016	0.013
Aroclor 1221	0.014
Aroclor 1232	0.013
Aroclor 1242	0.017
Aroclor 1248	0.013
Aroclor 1254	0.014
Aroclor 1260	0.014
alpha-BHC	0.00014
beta-BHC	0.00014
delta-BHC	0.023
gamma-BHC	0.0017
Benzal chloride	0.055
Benzene	0.14
Benz(a)anthracene	0.059
Benzo(a)pyrene	0.061
Benzo(b)fluoranthene	[1] 0.11
Benzo(g,h,i)perylene	0.0055
Benzo(k)fluoranthene	[1] 0.11
Bromodichloromethane	0.35
Bromomethane	0.11
4-Bromophenyl phenyl ether	0.055
n-Butyl alcohol	5.6
Butyl benzyl phthalate	0.017
2-sec-Butyl-4,6-dinitrophenol	0.066
Carbon tetrachloride	0.057
Carbon disulfide	0.014

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR ORGANICS—Continued

[Wastewaters]

Regulated constituents	Maximum for any 24 hr. composite total composition (mg/l)
Chlordane	0.0033
p-Chloroaniline	0.46
Chlorobenzene	0.057
Chlorobenzilate	0.10
2–Chloro-1,3-butadiene	0.057
Chlorodibromomethane	0.057
Chloroethane	0.27
bis-(2-Chloroethoxy) methane	0.036
bis-(2-Chloroethyl) ether	0.033
2-Chloroethyl vinyl ether	0.062
Chloroform	0.046
bis-(2-Chloroisopropyl) ether	0.055
p-Chloro-m-cresol	0.018
Chloromethane (methyl chloride)	0.19
2-Chloronaphthalene	0.055
2-Chlorophenol	0.044
3-Chloropropene	0.036
Chrysene	0.059
o-Cresol	0.11
Cresol (m- and p- isomers)	0.77
Cyclohexanone	0.36
1,2-Dibromo-3-chloropropane	0.11
1,2-Dibromoethane	0.028
Dibromomethane	0.11
2,4-Dichlorophenoxyacetic acid	0.72
o,p'-DDD	0.023
p,p'-DDD	0.023
o,p'-DDE	0.031
p,p'-DDE	0.031
o,p'-DDT	0.0039
p,p'-DDT	0.0039
Dibenzo(a,e)pyrene	0.061
Dibenzo(a,h) anthracene	0.055
tris-(2,3-Dibromopropyl) phosphate	0.11
m-Dichlorobenzene	0.036
o-Dichlorobenzene	0.088
p-Dichlorobenzene	0.090
Dichlorodifluoromethane	0.23
1,1-Dichloroethane	0.059
1,2-Dichloroethane	0.21
1,1–Dichloroethylene	0.025
trans-1,2-Dichloroethene	0.054
2,4-Dichlorophenol	0.044
2,6-Dichlorophenol	0.044
1,2-Dichloropropane	0.85
cis-1,3-Dichloropropene	0.036
trans-1,3-Dichloropropene	0.036
Dieldrin	0.017
Diethyl phthalate	0.20
p-Dimethylaminoazobenzene	0.13
2,4-Dimethyl phenol	0.036
Dimethyl phthalate	0.047
Di-n-butyl phthalate	0.057
1,4-Dinitrobenzene	0.32
4,6-Dinitrocresol	0.20
2,4-Dinitrophenol	0.12
2,4-Dinitrotoluene	0.32
2,6-Dinitrotoluene	0.55
Di-n-octyl phthalate	0.017
Di-n-propylnitrosoamine	0.40
Diphenylamine	[2]0.92
1,2–Diphenyl hydrazine	0.087
Diphenylnitrosoamine	[2]0.92
1,4-Dioxane	0.12
Disulfoton	0.017
Endosulfan I	0.023
Endosulfan II	0.029
Endosulfan sulfate	0.029
Endrin	0.0028
Endrin aldehyde	0.025
Ethyl acetate	0.34
Ethyl benzene	0.057
Ethyl ether	0.12
bis-(2-Ethylhexyl) phthalate	0.28
Ethyl methacrylate	0.14
Ethylene oxide	0.12
Famphur	0.017
Fluoranthene	0.068
Fluorene	0.059
Heptachlor	0.0012
Heptachlor epoxide	0.016
Hexachlorobenzene	0.055
Hexachlorobutadiene	0.055
Hexachlorodibenzo-furans	0.000063
Hexachlorodibenzo-p-dioxins	0.000063
Hexachloroethane	0.055
Hexachloropropene	0.035
Indeno(1,2,3,-c,d)pyrene	0.0055
Iodomethane	0.19
Isobutyl alcohol	5.6
Isodrin	0.021
Isosafrole	0.081
Kepone	0.0011
Methacrylonitrile	0.24
Methanol	5.6
Methapyrilene	0.081
Methoxychlor	0.25
3-Methylchloanthrene	0.0055
4,4-Methylene-bis-(2-chloroaniline)	0.50
Methylene chloride	0.089
Methyl ethyl ketone	0.28
Methyl isobutyl ketone	0.14
Methyl methacrylate	0.14
Methyl methansulfonate	0.018
Methyl Parathion	0.014
Naphthalene	0.059
2-Naphthylamine	0.52
p-Nitroaniline	0.028
Nitrobenzene	0.068
5-Nitro-o-toluidine	0.32
p-Nitrophenol	0.12
N-Nitrosodiethylamine	0.40
N-Nitrosodimethylamine	0.40
N-Nitroso-di-n-butylamine	0.40
N-Nitrosomethylethylamine	0.40
N-Nitrosomorpholine	0.40
N-Nitrosopiperidine	0.013
N-Nitrosopyrrolidine	0.013
Parathion	0.014
Pentachlorobenzene	0.055
Pentachlorodibenzo-furans	0.000035
Pentachlorodibenzo-p-dioxins	0.000063
Pentachloronitrobenzene	0.055
Pentachlorophenol	0.089
Phenacetin	0.081
Phenanthrene	0.059
Phenol	0.039
Phorate	0.021
Phthalic anhydride	0.055
Pronamide	0.093
Propanenitrile	0.24
Pyrene	0.067
Pyridine	0.014
Safrole	0.081
Silvex (2,4,5-TP)	0.72
2,4,5-T	0.72
1,2,4,5-Tetrachlorobenzene	0.055
Tetrachlorodibenzo-furans	0.000063
Tetrachlorodibenzo-p-dioxins	0.000063
1,1,1,2-Tetrachloroethane	0.057
1,1,2,2-Tetrachloroethane	0.057
Tetrachloroethene	0.056
2,3,4,6-Tetrachlorophenol	0.030
Toluene	0.080
Toxaphene	0.0095
Tribromomethane (bromoform)	0.63
1,2,4-Trichlorobenzene	0.055
1,1,1-Trichloroethane	0.054
1,1,2-Trichloroethane	0.054
Trichloroethene	0.054
Trichloromonofluoromethane	0.020
2,4,5-Trichlorophenol	0.18
2,4,6-Trichlorophenol	0.035
1,2,3-Trichloropropane	0.85
81,1,2-Trichloro-1,2,2-trifluoroethane	0.057
Vinyl chloride	0.27
Xylene(s)	[3]0.32
Total PCBs	0.1

[1] This standard represents the sum of the concentrations for each of this pair of constituents.

[2] This standard represents the sum of the concentrations for each of this pair of constituents.

[3] This standard represents the sum of the concentrations of m-xylene, o-xylene, and p-xylene.

2. Universal Standards for Metal Hazardous Constituents

EPA is also proposing both wastewater and nonwastewater

universal treatment standards for all 14 BDAT list metal constituents. The Agency believes it appropriate to develop universal treatment standards for all 14 metals because it is common practice to mix metal wastes during both wastewater and nonwastewater treatment. Since universal standards would apply to all listed wastes, all 14 metals have the potential to be in the treatment residuals and effluents. Further evaluation of characteristic metal wastes to determine the applicability of universal standards will be made in future LDR rulemakings.

These universal metal standards would replace the existing listed metal treatment standards. However, just as for the organic universal standards, the generator or owner/operator would not have to analyze for the entire BDAT list of constituents when measuring compliance; only those constituents that are regulated constituents in the listed waste would have to be analyzed.

a. Nonwastewaters. Since metals cannot be destroyed, treatment options are limited, and typically include technologies that can either recover the metal or incorporate the metal in a stable matrix resistant to leaching. The Agency believes that the "best" treatment for metals is recovery, where feasible, especially when the waste material contains high concentrations of metals. See, e.g., S. Rep. No. 284, 98th Cong. 1st Sess. 17. It is encouraging to see the regulated community increasingly evaluating both pyrometallurgical and hydrometallurgical recovery processes as treatment options.

Pyrometallurgical technologies (often referred to by EPA as high temperature metals recovery or HTMR) use heat to separate metals and other constituents based on differences in constituent oxidation potential, melting point, vapor pressure and/or miscibility when melted. Hydrometallurgical technologies separate metals and other constituents based on differences in constituent solubilities and electrochemical properties in aqueous solutions (or in some cases, such as solvent extraction, organic solutions).

Both of these technologies appear to be matrix independent, especially the pyrometallurgical processes (i.e., HTMR). That is, these systems consistently achieve the same level of treatment performance regardless of the influent matrix compositions. Often, pretreatment steps such as crushing and pelletizing may be necessary, but the amount of metal recovered is generally consistent for each matrix, depending on the design of the recovery process. For instance, a HTMR process designed to recover 95% of chromium from wastes will recover 95% of the chromium in a spent material refractory brick and 95% of the chromium in a wastewater treatment sludge.

If recovery is not feasible because the metal content in the material is low or the material contains constituents that may adversely affect the product, then the generator could investigate ways to generate wastes that are amenable to recovery (e.g., segregation), or to substitute materials that are suitable for recovery for the unrecoverable materials that eventually become wastes. Also, combinations of hydrometallurgical and pyrometallurgical recovery processes may be suitable for some wastes concentrated with different metals. Because many hazardous wastes contain a variety of metal constituents, it often takes a series of separation and concentration steps before a material is generated that is suitable for primary or secondary smelting operations.

As a last resort (see S. Rep. No. 284 at 17), technologies such as stabilization and chemical conversion to less leachable metal compounds should be used to treat metal-containing wastes. The Agency realizes that recovery of metals from all wastes is not practical. Therefore, at some level of metal concentration (EPA believes this level to be approximately one percent total BDAT list metals), recovery efforts typically cease, and the remaining metals can instead be incorporated into a stable, leach-resistant matrix for safe disposal.

EPA is, therefore, proposing to develop universal treatment standards for 13 of the BDAT list metals based on the performance of high temperature metals recovery (HTMR) or stabilization. (The treatment standards are presented in a table at the end of this section.) While the Agency's available data indicate that these standards can be achieved by either HTMR or stabilization, the Agency solicits data on whether any specific waste matrices will not be able to achieve these universal treatment standards.

The Agency believes that the choice of technology will likely depend on the concentration of the metals present in the waste. At low concentrations, stabilization may be the preferred treatment technology. As the metal concentration increases, stabilization may be difficult and increase volumes to such a degree as to make that form of treatment undesirable. At high concentrations, recovery will be the preferred method of treatment because it reduces the amount of waste destined for land disposal and recovers valuable resources. (Environmentally sound recycling is favored as the best treatment for any waste, whenever feasible.) As always, when the Agency develops concentration-based treatment standards, the use of other technologies to achieve those standards is not precluded.

With respect to the other BDAT list metal, arsenic, EPA is proposing to base the arsenic treatment standard on slag vitrification. Currently, most arsenic is not reclaimed from waste materials, but is imported into the United States from other countries. The Agency knows of one facility that has plans to recover arsenic from waste in the near future. Until these recovery processes for arsenic can be evaluated, EPA is proposing to base the arsenic treatment standard on the treatment performance of slag vitrification.

b. Wastewaters. The proposed universal metals standards for wastewaters are based on chemical precipitation as BDAT. These treatment standards are presented in a table at the end of this section. The wastewater treatment standards were developed by evaluating many different wastewaters.

For the most part, chemical precipitation is a matrix independent technology. In fact, many hydrometallurgical recovery processes recover metals from a wide variety of wastewaters by adjusting the wastewater with chemicals so that metals can be selectively solubilized and precipitated. Simple pretreatment steps such as equalization, skimming, and settling or filtration may be needed before precipitating reagents are added to the wastewater to facilitate effective treatment. Also, depending on the initial concentration of metal constituents in the wastewater, the operating conditions such as retention time and mixing may need to be adjusted. Hence, EPA believes that the proposed universal treatment standards are achievable for all RCRA listed wastewaters.

The Agency notes that the universal standards for metal wastewaters are different from both the 1987 and 1993 effluent guidelines standards established under the Clean Water Act. The Agency solicits comments on whether the Clean Water Act standards for Metal Finishing Point Source Category would provide a more appropriate set of universal wastewater standards.

c. Comments on the Advance Notice of Proposed Rulemaking. Most commenters to the Advance Notice of Proposed Rulemaking supported the establishment of universal treatment standards for metal bearing wastes. However, several disagreed with the

approach. In particular, one commenter argued that establishing only one standard for each metal constituent would cause a problem because it would not account for the variety of waste matrices, and the differences in the ability of stabilization to treat different matrices. The commenter suggested that EPA develop a separate set of treatment standards for the following seven different metal-bearing waste subcategories: (1) Wastewater treatment residues, (2) direct process wastes, (3) biological and organic containing residues, (4) direct process dusts and solids, (5) soils and sludges from remediation projects, (6) incineration residues, and (7) waste treatment residues (i.e., brines), slags, and refractories.

EPA is not adopting the approach suggested by the commenter. As stated previously, HTMR and stabilization are being proposed as BDAT for metal-containing nonwastewaters. Because HTMR is not matrix dependent, and, where the metal concentrations are appropriate, stabilization is able to achieve those levels, treatment standards for different matrices are not necessary. While it may be possible to set lower treatment standards for certain of the subcategories, one of the major reasons for establishing universal treatment standards is to streamline the LDR program. Establishing different subcategories could be just as complex as the current system. In addition, questions on how to distinguish between different subcategories would require development of a multitude of regulatory definitions. Available data indicate that each of the suggested waste subcategories can be treated to comply with the universal metal standards.

One commenter argued that in order for EPA to establish universal standards, the Agency would have to adopt the highest standard for any constituent to ensure that all wastes can be treated to conform with the standard. The commenter argued that there is variation among the specific treatment standards for identical metal constituents in different wastes and treatment groups. The commenter indicated that the main reasons for the differences are the wide variety of matrices treated, along with the limitations of stabilization.

The Agency does not believe that the variety of treatment standards is solely the result of treating different matrices. For example, analytical laboratories have different levels of accuracy for reporting detection limits, and many of the metal treatment standards are based on detection limits.

Several commenters submitted data on the treatability of metal wastes using stabilization. EPA reviewed the data and concluded that most metal wastes can be stabilized to the levels proposed as nonwastewater universal treatment standards. Some concentrated chromium waste streams were treated to levels slightly above the universal standards; however, the Agency believes HTMR to be a more appropriate treatment technology for concentrated metal wastes. This is especially true of wastes with high levels of chromium which are technically very responsive to HTMR and have considerable economic value relative to other common metals.

Moreover, since the inception of the Land Disposal Restrictions, EPA has observed that treatment facilities alter process design and/or operating parameters to achieve the levels established as treatment standards. Consequently, the Agency believes that there exists a certain degree of flexibility with most treatment technologies. (In addition, national and site-specific variances from the treatment standards remain an option, (See § 268.44).)

In summary, EPA believes it is appropriate to base BDAT for the universal metal standards on HTMR because it is a matrix independent technology that reduces the amount of material ultimately sent for land disposal. Also, because these standards could also be achieved by stabilization, the proposed levels would not be technology forcing (i.e., data indicate that stabilization can achieve the proposed universal treatment standards for a wide variety of nonwastewater matrices.)

d. Request for data. The Agency requests data and comment on whether there are any especially difficult to treat wastes that cannot achieve the proposed universal treatment standards. For nonwastewaters, information provided should include characterization data on the untreated wastes, such as total metal content, TCLP leachate concentrations, and technical explanations of why the waste material is inappropriate for recovery or ineffectively stabilized. Stabilization information should include type of binder, both weight and volume binder-to-waste ratios, whether premixing with less concentrated wastes is used to make the waste more amenable to stabilization, and TCLP results for the 14 metals. Information describing the treatment performance of stabilization (or other technologies) should also be submitted.

For wastewaters, information should include total metal concentrations (preferably for all 14 metals present) in the influent and effluent. Information should also address any other constituents in the waste that may be interfering with treatment (such as complexing agents), operating conditions such as Ph and retention times, amount and type of precipitating reagents added, and any other information needed to assist the Agency in evaluating the wastewater treatment process.

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR METALS

[Nonwastewaters]

Regulated Constituent	Maximum for any single composite sample TCLP (mg/l)
Antimony	2.1
Arsenic	5.0
Barium	7.6
Beryllium	0.014
Cadmium	0.19
Chromium (Total)	0.33
Lead	0.37
Mercury	0.009
Nickel	5.0
Selenium	0.16
Silver	0.30
Thallium	0.078
Vanadium	0.23
Zinc	5.3

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR METALS

[Wastewaters]

Regulated Constituent	Maximum for any single composite sample (mg/l)
Antimony	1.9
Arsenic	1.4
Barium	1.2
Beryllium	0.82
Cadmium	0.20
Chromium (Total)	0.37
Lead	0.24
Mercury	0.15
Nickel	0.55
Selenium	0.82
Silver	0.29
Thallium	1.4
Vanadium	0.042
Zinc	1.0

3. Universal Standards for Cyanide

Both wastewater and nonwastewater universal treatment standards are being proposed for cyanide in today's rule. The Agency believes it is appropriate to regulate cyanide because cyanide is commonly found in many listed metal-containing and organic-containing wastes. Furthermore, it is common practice to mix wastes during both wastewater and nonwastewater treatment. In developing universal standards for cyanide, the Agency reviewed the existing treatment

standards for cyanide as well as the data at were used in developing those andards; some of the standards include levels for total and amenable cyanide, while others only regulate total cyanide.

The existing wastewater standards are based primarily on the performance of alkaline chlorination. Wet air oxidation is another treatment technology supporting treatment standards for acrylonitrile wastewaters (i.e., K011, K013, and K014). With regard to nonwastewater forms, several of the existing standards are based on incineration (i.e., K048–K052, F037, F038, and F010) while several are based on treatment of the wastewater to destroy the cyanide prior to generation of the nonwastewater residual by technologies such as alkaline chlorination (i.e., F006 and F019) and electrolytic oxidation followed by alkaline chlorination (i.e., F011 and F012). Several of the existing standards were established based on transfers of treatment data from the treatment of a similar waste.

The types of wastes in which cyanide has been regulated under the BDAT program include: Electroplating (D003 reactive cyanides, F006); aluminum coil conversion (F019); heat treating (F010, F011, F012); metal cyanides (P013, P021, P029, P030, P063, P074, P098, P099, P104, P106, P121); multi-source leachate (F039); pigments (K005, K007); petroleum (K048, K049, K050, K051, K052, F037, F038); coking (K060); and organo-nitrogen (K104). Cyanide is also a regulated constituent in acrylonitrile wastes (K011, K013, K014) which are not included under universal standards (see earlier discussion in this section of today's preamble.)

a. Wastewaters. In developing the cyanide universal standards, the Agency examined the existing data and noticed certain patterns. In particular, it appears that regardless of process waste type, the wastewaters could generally be treated to levels on the order of 1.9 mg/l for total cyanide. Thus, the Agency is proposing for universal standards a total cyanide limit of 1.9 mg/l for wastewaters. This level is widely used in wastewater discharge regulations—namely those for the Metal Finishing Industry and the Organic Chemicals, Plastics and Synthetic Fibers Industry. The Agency has also established for the Metal Finishing Industry, an alternative standard of 0.86 mg/l for amenable cyanide. As such, EPA solicits comment on the need to regulate wastewaters for both total and amenable cyanide, or whether the amenable cyanide level should be an alternative to the total standard as provided in the Metal Finishing standards, 40 CFR 433.14(b).

b. Nonwastewaters. In developing universal standards for cyanide in nonwastewaters, the Agency examined three options: A standard based on total and amenable cyanide concentrations, a standard based on TCLP concentrations, and a standard that specifies treatment methods. Although EPA is proposing today adoption of the first option, comments are solicited on all three options. These three options are discussed below. In addition, the Agency solicits comment on the appropriateness of withdrawing the cyanide treatability variances in the 40 CFR 268.44, if EPA decides to promulgate the leach or the specified method option. Also, the Agency solicits data on any technology advances in treating iron cyanide wastewaters that would justify withdrawing these variances, if EPA promulgates the concentration option.

i. A Concentration-Based Standard. In examining the total concentration option, the Agency examined several issues that would affect the development of a universal concentration-based number. First, there is a wide range of existing BDAT treatment standards for nonwastewater forms of cyanide, ranging from 1.8 to 590 mg/kg (total cyanide) and 9.1 to 30 mg/kg (amenable cyanide). EPA established these different treatment levels after concluding that the available treatment data supported the establishment of separate treatability groups as a direct result of waste characteristics affecting treatment performance. For example, iron levels, the presence of organics, or the presence of complex iron-cyanides can affect the treatability of cyanide wastes. In addition, EPA found that some wastes, as generated, already contained low levels of cyanide in the waste.

Second, the analytical method for measuring cyanide in nonwastewaters allows significant variabilities in the resulting concentrations of total and amenable cyanides. The specified methods, SW 846/Method 9010 and 9012, do not specify sample size or distillation time. By varying these two factors, reported cyanide concentrations may differ by a factor of more than 100. In the Third Third BDAT rulemaking, the Agency avoided these kind of variabilities by specifying a 10 gram sample and a 1 hour and 15 minute distillation time in order to comply with LDRs applicable to nonwastewater forms of D003, F006, and F019. However, the 10 gram sample size and 1 hour and 15 minute distillation time have not been specified in setting other LDR treatment standards and thus, do not apply to all LDR cyanide limits—that is, EPA's existing data-base contains treatability results using various sample sizes/distillation times. This basically ensures that we cannot group and compare these data as though they were all based on the same analytical method.

A third issue that EPA is considering is that much of the treatability variance activity has been associated with total cyanide concentrations. There have been two variances approved allowing significantly higher levels (see 56 FR 12351, March 25, 1991) and three other treatability variance requests indicating that the 1.8 mg/kg level of total cyanide in F039 is unachievable. Again, the analytical test methods or the presence of iron-cyanide complexes appear to play some role in these treatability variance petitions.

In spite of these issues, EPA believes that it is technically feasible to develop a concentration based standard provided analytical variabilities and treatment of complex cyanides are taken into account. Electroplating wastes, the aluminum coil conversion wastes, the heat treating wastes, and the metal cyanide P- wastecodes all have high levels of cyanide in the untreated waste and/or have cyanide in a matrix (such as an iron-cyanide complex) that is difficult to treat. In the June 23, 1989 preamble (54 FR 26608), the Agency agreed with commentors that high concentrations of iron in the cyanide wastes (when present as iron-cyanide complexes) appear to effect the level of cyanide destruction that is achievable.)

Based on the most difficult to treat nonwastewaters, the Agency is proposing universal treatment standards of 590 mg/kg for total cyanide and 30 mg/kg for amenable cyanide (as measured by Method 9010 or 9012). EPA is also proposing that a 10 gram sample and 1 hour and 15 minute distillation time be used for the purpose of complying with these universal standards.

Other wastes such as multi-source leachate, pigments, petroleum, coking, ink solvents and organo-nitrogen wastes generally have very little cyanide in the untreated waste to begin with, have cyanide along with organic constituents which are routinely incinerated, or have cyanide in a free form which is easier to treat by conventional treatment methods. For these nonwastewaters, the Agency is soliciting comment on whether these other wastes need to be regulated at a level below the universal treatment standard, namely, at 30 mg/kg for total cyanide and 1.8 for amenable cyanide.

At this time, the Agency believes that establishing a lower limit to address wastes that contain little to no cyanide is unnecessary; that control of organic constituents which are routinely incinerated provides adequate control, and that inorganic wastes with cyanide in a free form are adequately controlled by the amenable cyanide limit of 30 mg/kg. However, the Agency specifically solicits comments on these points.

ii. A Leachable Based Standard. The leach option involves specifying a concentration standard based on the TCLP or some other leaching procedure. For previous LDRs, the Agency has selected a total concentration standard to best reflect the capabilities of destruction technologies. In rare instances, where there are analytical difficulties, the Agency has elected to regulate wastes based on a TCLP concentration, even though the basis for BDAT was a destruction technology. For cyanide, EPA is faced with a chemical that has analytical difficulties and can be effectively destroyed by certain technologies. Basing the standard on the TCLP concentration, however, avoids the analytical difficulties and still provides the treater with the flexibility of using a variety of destruction technologies to comply with the standard.

After examining the treatment data for TCLP levels, the Agency solicits comments on the following TCLP cyanide limits: 16 mg/l for total cyanide and 3.5 mg/l for amenable cyanide. Each concentration based standard is based on two data points from a data set of three data points (an outlier test on TCLP levels for the amenable and total cyanide rejected one data point.) These cyanide limits are based on cyanide levels measured in residues from EPA's rotary kiln incineration test study of EPA Hazardous Waste No. K088. These hazardous wastes are associated with spent carbon electrodes (spent pot liners) generated by the aluminum industry. EPA Hazardous Waste No. K088 wastes are contaminated with sodium aluminum fluoride salts, trace metals, and heavy concentrations of free and iron complex cyanides.

EPA subsequently stabilized these K088 incineration residues in order to treat leachable fluoride values. None of the stabilized wastes show, however, any improvement for the leachability of amenable and total cyanide levels. To the contrary, some of the stabilized K088-incineration wastes show an increase of TCLP levels for amenable and total cyanide. Still, EPA's study shows that K088 underwent significant destruction of total and amenable cyanide values by rotary kiln incineration; concentrations of cyanide in untreated wastes ranged from 3,400 mg/kg to 5,240 mg/kg and in treated residues ranged from 95 to 210 mg/kg total cyanide and from 38 to 140 mg/kg amenable cyanide.

An alternative to these levels is an amenable cyanide level of 36 mg/l based on a modified TCLP. The modified TCLP is based on a deionized water leach as opposed to an acid leach. This proposed water leach level is based on residues resulting from the calcination of spent potliners via a Reynolds process. The Reynolds process carries out the calcination of K088 in a rotary kiln that operates at similar temperature and residence time conditions to those of EPA's incineration test study. In contrast to EPA's incineration study, Reynolds' process adds up to 35% sand and 35% limestone to the calcination of K088 (K088 may comprise up to 30% of the total feed charged to the calciner.)

Like EPA's incineration study, Reynolds' calcination process shows that substantial destruction of cyanide values can be achieved by thermal processes (in Reynolds' demonstration study, cyanide values in the untreated K088 wastes ranged from 18.1 mg/kg to 1,110 mg/kg for total cyanide and from 2.6 mg/kg to 1,110 mg/kg for amenable cyanide and in treated K088 residues levels of both cyanide species were below the detection level of 10 mg/kg. Taking into account any dilution resulting from the addition of lime and sand, these treated values are more likely to be in the range of 30 mg/kg.)

Other performance data measuring cyanide concentrations in leachate extracts include CyanoKem's stabilization of alkaline chlorinated cyanide wastes, EPA's stabilization study of cyanide wastes from the aluminum coil industry, and stabilization data submitted by commentors to EPA's second and third third rulemakings of cyanide wastes. EPA has placed all these stabilization data in the administrative record of today's proposal. (See memorandum to Administrative Record on Available Stabilization Data on Cyanide Wastes.)

Except for CyanoKem's data, these stabilization studies lack information on whether any pretreatment step for the destruction of the cyanide occurred prior to stabilization. Of course, a majority of the RCRA-cyanide wastes are likely to be sludges resulting from the treatment of cyanide/metal-bearing wastewaters discharged to POTWs or to outfalls under NPDES permits; however, these wastewater treatment sludges may not have been generated from cyanide destruction technologies. Some facilities discharging under NPDES or POTW permits may simply switch cyanides from wastewaters to sludges in a cyanide-metal complex form or into a thiocyanate form for the purpose of complying with their water effluent limitations. These matrices may leach from the landfill, migrate to surface waters, or oxidize when exposed to sunlight and thus, release free cyanides into the environment. EPA thus believes that treatment standards for cyanides must be based on residues from the destruction of cyanides prior to any stabilization or ultimate disposal. However, the Agency is soliciting comment on whether there are cyanide wastes that are more appropriately immobilized. Any commentors submitting such data should include proper justification for why the cyanide in these wastes cannot be destroyed (which is the Agency's preference).

Although 3004(m) of HSWA gives regulatory discretion to EPA on whether to set treatment standards that substantially reduce the mobility or toxicity of hazardous constituents prior to land disposal, the legislative history also emphasizes the Congressional concern that cyanides should be treated by destruction technologies prior to disposal: "[d]estruction of total cyanides should be required as a precondition to land disposal." 130 Cong. Rec. S 9179 (daily ed. July 25, 1984) (Statement of Senator Chaffee explaining the amendment which became section 3004(m).)

CyanoKem's stabilization data submittal may support development of a treatment standard of 10 mg/l of amenable cyanide, as measured in an extract of an alkaline leach of chemically stabilized cyanide wastes. These cyanide wastes were previously treated by alkaline chlorination and subsequently treated by stabilization. CyanoKem's data are based on monthly composite samples. CyanoKem points out, however, that the amenable leachate cyanide level can be enforced with the collection of grab samples. CyanoKem's data also indicate that a broad variety of cyanide wastes with untreated total cyanide concentrations up to 500,000 mg/kg, including complex cyanides, were treated by alkaline chlorination (to levels below 400 ppm—total cyanide, as measured by Method 9010) followed by chemical stabilization. The wastes treated by CyanoKem include: D003, F006–F012, P013, P021, P029, P030, P098, P106, and P121. CyanoKem also indicated that the addition of solidification/stabilization agents such as fly ash or cement does not result in any further treatment of cyanide in the final (the alkaline chlorinated) sludge. EPA

requests comments on the feasibility of basing a leachate standard based on these CyanoKem data including the adoption of its leaching procedure. The Agency also requests comments on whether amenable, total, or both total and amenable cyanide should be regulated under the universal standards.

iii. Specifying Treatment Methods. The final option is to specify methods. EPA is soliciting comments on requiring the use of incineration, alkaline chlorination, or electrolytic oxidation followed by alkaline chlorination, and wet air oxidation to treat cyanide. EPA believes these technologies have been demonstrated to treat wastes with high concentrations of free cyanides (over 100,000 ppm) or complex iron cyanides (the most difficult to treat of all the cyanide species.)

As part of the First, Second, and Third Third rulemakings, EPA examined a broad range of oxidation technologies that enable the destruction of cyanides in a diverse universe of wastewater and nonwastewater forms of hazardous wastes. Chemical oxidation technologies enable the destruction of dissolved cyanides in aqueous solutions, such as wastewaters from plating and finishing operations, or of inorganic sludges from these operations. Chemical oxidation technologies examined by EPA include:

(1) Electrical oxidation, (2) hypochlorite or chlorine oxidation (alkaline chlorination), (3) permanganate, ozone, or Sulfur dioxide/air (Inco process) oxidation, (4) wet air oxidation, (5) high temperature (cyanide) hydrolysis, and (6) UV/Ozonolysis.

One, or combinations, of these technologies can reduce the concentration of cyanides in the wastes. Incineration, peroxide treatment, alkaline chlorination, or electric oxidation followed by alkaline chlorination, high temperature hydrolysis, or UV/ozonolysis appear to effectively destroy amenable cyanides, cyanide-metal complexes (to varying degrees), or chelating agents. EPA has data in today's docket showing that high concentrations of amenable cyanides (over 100,000 ppm) can be treated effectively by high temperature hydrolysis or electric oxidation to levels below 500 ppm when followed by alkaline chlorination or other oxidation technologies. There are also data showing that complex cyanides, including iron-cyanides, can be treated effectively by combinations of alkaline chlorination and some oxidation technologies.

It appears that the use of sulfur dioxide/air oxidation, the Kastone process (an oxidation process for treating rinse waters from zinc or cadmium metal finishing operations), and potassium permanganate alone may only oxidize amenable cyanides to cyanates or thiocyanates and thus, further oxidation treatment is necessary to destroy cyanides. These technologies do not appear to destroy iron-cyanide complexes. For instance, sulfur dioxide/air oxidation leaves behind iron cyanide complexes reduced in a ferrous state that are removed from solution by precipitation of ferro-cyanide complexes. EPA solicits comments that demonstrate how these chemical oxidation technologies can destroy iron-cyanide complex wastes and not just shift iron-cyanide complexes from one media to another.

Incineration, UV/ozonation (catalyzed), and a proprietary improved alkaline chlorination process appear to more effectively treat complex cyanides including iron cyanides—the most resistant to oxidation treatment of the cyanide-metal complexes. EPA has data demonstrating its applicability to the following cyanide wastes: K086, F010, K048–K052, F037, F038, K011, K013, K014, K104, K106, F006, F010, and F019.

EPA also has data on the treatment of aluminum spent potliners by incineration and calcination technologies. These incineration and calcination data show that cyanide complexes and amenable cyanides can be treated to a total cyanide level below 210 mg/kg. (See above discussion supporting the alternative universal leachable levels for cyanides.)

Wet Air Oxidation (WAO) is another cyanide destruction technology examined by EPA. It is, in fact, the basis of treatment standards for K011, K013, and K014 (acrylonitrile) wastewaters (See 55 FR 22584, June 1, 1990). WAO can reduce the concentration of organics and cyanides in wastewaters (that contain less than 1% Total Suspended Solids and less than 5% Total Organic Content.) Effluent wastewaters often undergo additional treatment by other technologies such as biological treatment to further reduce organic levels in the wastewaters. Similarly, subsequent treatment of nonwastewater forms is often provided in order to comply with applicable LDRs for organics and metals. EPA thus believes that it is technically feasible to include WAO among those cyanide destruction technologies being considered under the option of prescribed technologies.

These treatment standards for wastewaters and nonwastewaters must be achieved by destruction, not by stabilization or immobilization or by simply converting the cyanide to cyanate, ferrous or ferric cyanide complexes. In light of the legislative history of HSWA, EPA believes (cyanide) destruction technologies will serve better the requirements of 3004(m).

In general, the Agency would prefer to specify a numerical standard, so that treaters may be free to use other technologies to destroy the cyanide and achieve the standard. Due to the complexity of the issues involved in treating cyanide, the Agency is including this option to provide commentors a complete range of options to consider.

PROPOSED UNIVERSAL TREATMENT STANDARD FOR CYANIDE

[Wastewaters]

Regulated constituent	Maximum for any single composite sample (mg/l)
Cyanide (Total)	1.9

PROPOSED UNIVERSAL TREATMENT STANDARDS FOR CYANIDE*

[Nonwastewaters]

Regulated constituent	Maximum for any single composite sample (mg/kg)
Cyanide (Total)	590
Cyanide (Amenable)	30

Note: *Cyanide nonwastewaters are analyzed using SW–846 Method 9010 or 9012, sample size 10 grams, distillation time, one hour and 15 minutes.

4. Universal Standards for Petroleum Refining Wastes

In the Third Third final rule (55 FR 22520, June 1, 1990) the Agency examined treatment data from noncombustion technologies as a basis for BDAT for certain petroleum refining listed wastes—K048–52. In the LDR Phase I final rule (57 FR 37194, August 18, 1992), the Agency extended those limits to other petroleum refining wastes—F037–38. The universal standards for organics, however, are based on combustion. The proposal to cover these wastes under the universal standards is based on the expectation that the noncombustion technologies considered during the development of the K048–52 standards (viz. 3- or 5-phase solvent extraction) can also achieve the universal standards. The background document for the F037–38 standards lists in Appendix B twenty treatability tests used to develop the

K048–52 standards. Eleven of these tests fully complied with the universal treatment standards. Appendix C of the same document identifies 28 other test runs using noncombustion technologies. All of these tests fully complied with universal standards.

During the later development of the F037–38 standards, comments were submitted that thermal desorption could achieve much lower levels than those used for K048–52; lower, in fact, than the universal treatment standards proposed in today's rule. Based on the information that noncombustion technologies can also achieve the universal standards when treating petroleum refining wastes, the Agency is proposing to include K048–52 and F037–38 petroleum refining wastes under the universal standards.

The Agency is aware that the industry is using combustion and thermal desorption, both of which should be capable of meeting the universal standards. Comments are solicited on whether the industry has invested in other technology that cannot meet the universal standards. In particular, information on the type of treatment, performance data, and an explanation as to why operational factors could not be adjusted to comply with the universal standards, are solicited. To the extent data demonstrates that petroleum refining wastes treated by appropriate noncombustion technologies can achieve slightly higher levels than those proposed for universal standards, the Agency may choose to revise the universal standards.

As a general matter for all hazardous wastes, the Agency solicits comments and data on whether slight adjustments to the universal standards would encourage the further use of noncombustion technologies and still represent BDAT.

5. Universal Standards Will Not Apply to F024

F024 is being excluded from the universal treatment standards. Treatment standards for F024 constituents, including polychlorinated dioxins and polychlorinated furans, were promulgated in the Second Third rule (54 FR 26615, June 23, 1989). The standards were revised in the Third Third rule (55 FR 22580, June 1, 1990). These concentration-based treatment standards for F024 are lower than the universal standards for the regulated F024 constituents. The revised standards did not include any specific concentration-based treatment standards for dioxins or furans, but did require that the F024 waste be treated by incineration.

The Agency believes that if F024 wastes are properly incinerated, and the treatment standards for the nine regulated organic constituents are met, then dioxins and furans, as well as all of the other hazardous constituents in the waste will be substantially destroyed. In light of this issue, the Agency is retaining the existing treatment standards for F024 and is not applying the universal treatment standards to this waste.

B. Incorporation of Newly Listed Wastes into Lab Packs and Proposed Changes to Appendices

On June 1, 1990 (55 FR 22629), EPA promulgated alternative treatment standards for lab packs under 40 CFR 268.42(c) that specified methods of treatment that could be used prior to land disposal. EPA promulgated these alternative standards to provide relief to treaters from having to monitor compliance with numeric treatment standards for many different wastes that could be included in the lab pack. The alternative treatment standards applied to two categories of lab packs as specified in Appendix IV (organometallic) and Appendix V (organic) to part 268. In the January, 1991, correction notice and again in the May 30, 1991, Advance Notice of Proposed Rulemaking (56 FR 24453), the Agency requested comment on potential improvements to the existing alternative treatment standards for Appendix IV and Appendix V. In particular, the Agency solicited opinions on whether a regulatory definition of organometallics was necessary, or whether other regulatory requirements should be developed to prevent potential misuse of the existing appendix IV lab pack requirements.

As noted in the May, 1991 ANPRM, EPA's original intent in establishing these two appendices was to simplify the regulations related to lab packs needed incineration followed by chemical stabilization of the ash (Appendix IV), from those lab packs needing only incineration (Appendix V). However, under 40 CFR 268.42(c)(4), the residue from incineration of both types of lab packs must be treated to address any hazardous characteristic for the TC metals, i.e., D004–D008, D010, and D011. (D009 mercury wastes are not included in this list because mercury-bearing wastes are excluded from the alternative lab pack treatment standard.) As such, there is no practical difference between the treatment required for the two types of lab packs. The Agency believes that combing the appendices into appendix IV will simplify procedures. In the May 30, 1991 ANPRM, EPA solicited comment on consolidating appendix V into appendix IV. Comments received were favorable in that such a change would simplify compliance with the procedures.

The Agency is proposing to replace the two appendices with a list of excluded wastes. The existing alternative treatment standard for lab packs would be retrained: Incineration (40 CFR 268.42(c)(3)) followed by treatment of characteristic metals (excluding mercury (40 CFR 268.42(c)(4).) Considering that two organo-mercury wastes, PO65 and PO92, are allowed in lab packs, the Agency solicits comments on whether incinerator residues should also be required to comply with the D009 mercury standards.

Because the number of prohibition waste codes is small, the regulated community will be able to quickly determine if a waste is excluded from the alternative lab pack treatment standard. The proposed list of excluded waste codes is shown in table D–1, below.

TABLE D–1.—LIST OF WASTE CODES TO BE EXCLUDED FROM THE LAB PACKS

D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.

The waste proposed for exclusion are the same as those currently excluded, with the following exceptions. K071, a mercury waste that was inadvertently listed on appendix IV, will now be excluded. The Agency's action regarding K071 is consistent with the exclusion of all other inorganic mercury wastes. Another difference with the current exclusion list is that six cyanide-containing wastes—F007, F008, F009, F011, F012, and K007 will be allowed in lab packs. EPA believes that cyanide will be effectively destroyed by combustion.

EPA is also proposing that the following newly listed wastes (i.e., all wastes listed or identified since November 1984) be eligible for the alternative treatment standards for lab packs: The newly listed wastes for which treatment standards were promulgated in the LDR Phase I rule (57 FR 37194, August 18, 1992), and the newly listed and TC wastes for which treatment standards are being proposed in today's rule.

EPA requests comments on all aspects of today's alternative lab pack proposal, including the usefulness of the proposed standards at treatment,

storage, and disposal facilities, and whether a list of excluded wastes is necessary, given the alternative of using limits on emissions from combustion units and metal limits on the solid residuals. For example, inorganic mercury wastes are excluded from lab packs. The reason for excluding these wastes is that they are not effectively treated by combustion; and furthermore mercury, which is a volatile metal, may cause emission concerns. Alternatively, EPA could rely on existing mercury standards for Boilers and Industrial Furnaces and omnibus limits for hazardous waste incinerators to address emission concerns; and a mercury limit could be placed on the solid residual by adding D009 to the list of metal limits in § 268.42(c)(4) to ensure effective treatment of the solid residual.

C. Proposed Changes in the LDR Program in Response to the LDR Roundtable

1. Background

The Office of Solid Waste convened a roundtable meeting on January 12–14, 1993, to discuss the LDR program. The purpose of the roundtable was to hear from persons experienced in implementing the LDR program on what was working well, what was not working well, and what could be done to improve the program. These discussions were a forum for sharing concerns and information in a constructive and candid manner, rather than to reach consensus or serve as formal negotiations.

In the spirit of quality improvement, EPA's goal is to make the LDR program more efficient and easier to implement. The roundtable was part of a comprehensive LDR implementation study. EPA developed the LDR program under stringent deadlines; thus the implementation study presents an opportunity to assess its effectiveness and implementation. The Agency is using the information gained from this study, beginning with the January roundtable, to improve the existing LDR program and to guide its future direction.

Roundtable participants were waste generators, treaters and disposers, public interest groups, state environmental agencies, other Federal agencies, and EPA headquarters and regional personnel. Major issues were identified in advance by roundtable participants and the discussions focused on these topics: Treatment standards, monitoring, and administrative and paperwork requirements.

To facilitate discussion, five small groups were created. The small groups discussed the issues, identified the most important issues associated with each topic and provided additional detail or potential solutions. The small groups then reconvened in general session to report back the group's recommendations. (The complete proceedings for the roundtable are included in the RCRA docket numbered F–92–CD2F–S0144.)

The participants identified the following major issues relative to the LDR treatment standards:

- Waste code-carry through,
- Use of health-based versus technology-based numbers as the standard,
- Defining the point at which wastes enter or exit the LDR "system",
- Inconsistency of individual standards for constituents across waste codes,
- Capacity for treatment,
- Storage of waste for greater than one year,
- Existing treatment standards for hazardous soil,
- Standards modifications, and
- The need for user-friendly guidance on treatment standards.

The participants identified the following major issues relative to LDR monitoring:

- Providing clarification for the use of generator knowledge,
- Constituent monitoring,
- Revisions to the Toxicity Characteristic Leaching Procedure (TCLP),
- Detection limits,
- Waste analysis plans, and
- Guidance and training.

Although views on the LDR program varied, feedback from the participants indicated that coming together to discuss these issues was very worthwhile. EPA is today proposing to incorporate some of the recommendations made by roundtable participants, as discussed below. For example, the Agency is proposing to consolidate the three existing treatment standard tables and to simplify the notification requirements, as discussed below. In addition, as discussed in section III.A., the Agency is also preparing to develop a uniform set of universal treatment standards. For other issues raised at the roundtable, the Agency is continuing to develop improvements to the LDR program.

2. Consolidated Treatment Table

Several of the groups present at the LDR roundtable expressed an interest in having a consolidated treatment standard table in the regulations. Participants stated that the existing system of three tables (see 40 CFR 268.41–268.43) was too complex and burdensome to use.

When the LDR program began, the Agency believed it was useful to clearly delineate in the regulation the differences between numerical treatment standards as measured in leachate from the Toxicity Characteristic Leaching Procedure (table CCWE at 268.43) from standards measured through a total waste analysis (table CCW at 268.42). Furthermore, it was useful to clarify that the specified methods of treatment (tables 2 and 3 at 268.43) differed from numerical standards in that numerical standards can be met through the use of any technology, whereas specified methods must be used to treat the waste. When specified methods are used, there is no need to measure the treatment residue for compliance purposes.

However, now that the program has been in place for a number of years and almost all hazardous wastes are subject to treatment standards, the Agency agrees that the regulations can be simplified. First, the Agency believes the program has been in place long enough so that the regulated community generally understands the system. Thus, it may not be necessary to make such obvious delineations. Second, there is considerable overlap between the tables. For instance, a listed waste may contain both organic constituents and metals. Treatment standards for the organic constituents appear in § 268.43, where a cross reference to § 268.41 appears that refers the reader to the treatment standards for the metals. A few wastes have treatment standards appearing in all three places. The consolidated table provides all necessary information in an easier-to-read format. The Agency notes that the new table does not contain the proposed universal treatment standards, instead relying on the standards currently found in the three existing tables. If the consolidated table and the universal standards are both finalized, the table will contain the universal standards.

Therefore, EPA is proposing in today's rule a table which combines the information found in § 268.41 Table CCWE.—Constituent Concentrations in Waste Extract, § 268.42 Table 2.—Technology-Based Standards by RCRA Waste Code, and § 268.43 Table CCW.—Constituent Concentrations in Wastes. The Agency is proposing to call the table "Treatment Standards for Hazardous Waste" and place it at § 268.40 along with much of the text found currently in §§ 268.41, 268.42, and 268.43. Section 268.42 would continue to be used to describe the technology codes, regulate California

list PCBs and HOCs, set out exemptions from the required methods, and provide for procedures for equivalency determinations. The Agency requests comments on the usefulness of the consolidated table.

3. Simplified LDR Notification Requirements

Comments on the § 268.7 notification requirements at the LDR roundtable ranged from eliminating notification altogether to modifying or deleting data items on the notification form. It was also suggested that the LDR notification form be combined with the manifest. The manifest form is currently being revised through a regulatory negotiation process; as part of the process, the group discussed the possibility of combining the manifest and the notification form. Due to a number of factors, the group decided not to consider combining the LDR notification requirements with the manifest form. Since it is not possible at this time to combine the manifest with the notification form, and since the Agency believes that the LDR notifications are necessary to document cradle-to-grave hazardous waste management, the Agency explored ways to simplify the information required on the notification form. The Agency proposes to omit the requirement at § 268.7(a)(1)(ii) and at § 268.9(d)(1) that the notification include treatment standards or references to those standards.

Such a simplification makes particular sense in conjunction with consolidating the treatment standard tables. Therefore, the Agency is proposing that the only information required to be included in the notification will be the EPA Hazardous Waste Number, whether the waste is a nonwastewater or wastewater, waste analysis data where available, the manifest number associated with the shipment, the constituents in the waste for certain D001 and D002 wastes for which treatment standards for the underlying hazardous constituents must be met (see 58 FR 29860, May 24, 1993), and the specific hazardous constituents in EPA Hazardous Wastes Nos. F001–F005, and F039 for which treatment is required. Today's proposal would not alter the certification requirements at § 268.7.

Participants at the LDR roundtable also requested a summary of all the LDR paperwork requirements. The Agency is therefore proposing that such a table be included as an appendix to part 268. The Agency requests comment on the notification simplification and summary table shown below. Also, comment and examples are requested on whether a flow chart might be more useful than the summary table.

TABLE 1.—RECORD-KEEPING, NOTIFICATION, AND/OR CERTIFICATION REQUIREMENTS

Entity	Scenario	Frequency	Recipient of notification	Record-keeping, notification, and/or certification requirements
I. Generator	A. Waste does not meet applicable treatment standards or exceeds applicable prohibition levels [§ 268.7(a)(1)].	Each shipment	Treatment or storage facility.	Notice must be in writing and include: • EPA hazardous waste number • Constituents of concern for certain wastes • Treatability group • Waste analysis data (where available).
	B. Waste can be disposed of without further treatment (meets applicable treatment standards or does not exceed prohibition levels upon generation) [§ 268.7(a)(2)].	Each shipment	Land disposal facility ...	Notice and certification statement that waste meets applicable treatment standards or applicable prohibition levels. Notice must include: • EPA hazardous waste number • Constituents of concern for certain wastes • Treatability group • Manifest number • Waste analysis data (where available) Certification statement required under § 266.7(a)(2)(ii) that waste complies with treatment standards and prohibitions.
	C. Waste is subject to exemption from a prohibition on the type of land disposal utilized for the waste, such as a case-by-case extension under § 268.5, an exemption under § 268.6, or a nationwide capacity variance [§ 268.7(a)(3)].	Each shipment	Receiving facility	Notice must include: • Statement that waste is not prohibited from land disposal • EPA hazardous waste number • Constituents of concern for certain wastes • Treatability group • Manifest number • Waste analysis data (where available) • Date the waste is subject to the prohibitions.
	D. Waste is in tanks or containers regulated under 40 CFR 262.34 (accumulated waste) and being treated in such containers to meet applicable treatment standards [§ 268.7(a)(4)].	Minimum of 30 days prior to treatment activity.	EPA Regional Administrator (or his designated representative) or authorized State. Delivery must be verified.	Generator must develop, keep onsite, and follow a written waste analysis plan describing procedures used to comply with the treatment standards. If waste is shipped offsite, generator also must comply with notification requirement of § 268.7(a)(2).

TABLE 1.—RECORD-KEEPING, NOTIFICATION, AND/OR CERTIFICATION REQUIREMENTS—Continued

Entity	Scenario	Frequency	Recipient of notification	Record-keeping, notification, and/or certification requirements
	E. Where generator is managing a lab pack containing certain wastes and wishes to use an alternative treatment standard [§ 268.7(a)(8) or (a)(9)].	Each shipment	Treatment facility	Notice in accordance with § 268.7(a)(1), (a)(5), and (a)(6), where applicable. Certification in accordance with § 268.7(a)(8) or § 268.7(a)(9), respectively.
	F. Small quantity generators with tolling agreements [pursuant to 40 CFR 262.20(c)] [§ 268.7(a)(10)].	Initial Shipment	Treatment facility	Must comply with applicable notification and certification requirements in § 268.7(a). Generator also must retain copy of the notification and certification together with tolling agreement onsite for at least 3 years after termination or expiration of agreement.
	G. Generator has determined waste is restricted based solely on his knowledge of the waste [§ 268.7(a)(5)].	N/A	Generator's file	All supporting data must be retained onsite in generator's files.
	H. Generator has determined waste is restricted based on testing waste or an extract [§ 268.7(a)(5)].	N/A	Generator's file	All waste analysis data must be retained onsite in generator's files.
	I. Generator has determined that waste is excluded from the definition of hazardous or solid waste or exempt from Subtitle C regulation [§ 268.7(a)(6)].	One-time	Generator's file	File a one-time notice stating such generation, subsequent exclusion from the definition or exemption from Subtitle C, and the disposition of waste.
	J. Other record-keeping requirements [§ 268.7(a)(7)].	N/A	Generator's file	Generator must retain a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to § 268.7 onsite for at least 5 years from the date that the waste was last sent to onsite or offsite treatment, storage, or disposal. This period is automatically extended during enforcement actions or as requested by the Administrator.
II. Treatment Facility.	A. Waste shipped from treatment facility to land disposal facility [§ 268.7(b)(4), (b)(5)].	Each shipment	Land disposal facility	Notice must include: • EPA hazardous waste number • Constituents of concern • Treatability group • Prohibition levels • Manifest number • Waste analysis data (where available) Certification as set out in § 268.7(b)(5)(i), (ii) and (iii) stating that the waste or treatment residue has been treated in compliance with applicable performance standards and prohibitions.
	B. Waste treatment residue from a treatment or storage facility will be further managed at a different treatment or storage facility [§ 268.7(b)(6)].	Each shipment	Receiving facility	Treatment, storage, or disposal facility must comply with all notice and certification requirements applicable to generators.

TABLE 1.—RECORD-KEEPING, NOTIFICATION, AND/OR CERTIFICATION REQUIREMENTS—Continued

Entity	Scenario	Frequency	Recipient of notification	Record-keeping, notification, and/or certification requirements
	C. Where wastes are recyclable materials used in a manner constituting disposal subject to §266.20(b) [§268.7(b)(7)].	Each shipment	Regional Administrator (or his delegated representative).	No notification to receiving facility required pursuant to §268.7(b)(4). Certification as described in §268.7(b)(5) and notice with information listed in §268.7(b)(4), except manifest number. Recycling facility must keep records of the name and location of each entity receiving hazardous waste-derived products.
III. Land Disposal Facility.	A. Wastes taken to land disposal facility [§268.7(c)].	.....	.....	Maintain copies of notice and certifications specified in §268.7(a) and (b) and §268.8, if applicable.

4. Demonstrating Acceptable Knowledge of One's Waste

Under the LDR program, generators may characterize their waste based either on knowledge of the waste or on analytical data. On the other hand, treatment, storage, and disposal facilities (TSDFs) must periodically test their wastes, according to the frequency specified in the Waste Analysis plan (WAP); at other times, they may use knowledge to characterize their waste. Several participants at the LDR Roundtable expressed the need for guidance as to what constitutes acceptable knowledge when characterizing waste.

a. Background. The general and specific waste characterization requirements can be met using several methods or combinations of methods. Wherever feasible, the preferred method to meet the waste characterization requirement is to conduct sampling and laboratory analysis because this data in most cases provides the most definitive information on constituent concentration levels in waste compared to LDR treatment standards. However, generators and TSDFs also can meet waste characterization requirements by applying "acceptable knowledge." Acceptable knowledge can be used to meet all or part of the waste characterization requirements.

b. What Constitutes Acceptable Knowledge? Acceptable knowledge is broadly defined to include "process knowledge" and the facility's records of analysis performed before the effective date of RCRA regulations, or a combination of these with actual chemical analysis of the waste.

"Process knowledge" could constitute acceptable knowledge when detailed information on the wastes is obtained from existing published or documented waste analysis data or studies conducted on hazardous wastes generated by processes similar to that which generated the waste. EPA also solicits comment on other types of information that would come under the definition of process knowledge.

EPA lists certain hazardous wastes in 40 CFR part 261. For example, the K-listed wastes (e.g., K001 wastes, defined as bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol) are listed by the specific process that generated the waste (rather than by the characteristic of the waste that is generated.) Therefore, with many listed wastes ("K", "P", and "U") the application of acceptable knowledge is appropriate because the waste characteristics are generally consistent and well known from facility to facility. In the case where a generator sends waste off-site for treatment, storage, or disposal, the TSDF may rely on process knowledge supplied by the generator as a basis for the TSDF's waste characterization. (See §264.13.)

Some facilities have records of analysis performed before the effective date of RCRA regulations. While seemingly attractive because of the potential savings associated with using existing information (such as published data), the facility must ensure that this information accurately characterizes applicable wastes.

c. When Might Acceptable Knowledge Be Used? Generators and TSDFs may use acceptable knowledge alone or in conjunction with sampling and laboratory analysis. There are situations where it is appropriate to apply acceptable knowledge, for example, when:

- The hazardous constituents in wastes from specific processes are well documented, such as with the K-listed wastes mentioned previously.
- Wastes are discarded unused commercial chemical products, reagents or chemicals of known physical and chemical constituents. Several of these fall into the "P" and "U" categories.
- Other site-specific/process-specific factors.

The Agency requests comment on other appropriate situations in which acceptable knowledge is appropriate.

d. Why Provide Evidence to Support Acceptable Knowledge? For enforcement purposes, EPA seeks evidence that demonstrates that the information relied upon is sufficient to identify the waste accurately and completely. Such evidence (e.g., knowledge of the process that generated the waste) is essential for identifying constituents that must meet LDR standards.

e. How Can A TSDF Verify Data Supplied by a Generator? There are considerations that a TSDF should be aware of when relying upon acceptable knowledge to manage wastes. First, if the TSDF relies in part on information supplied by a generator, the TSDF must become thoroughly familiar with the generator's processes to verify the integrity of the data. This can be accomplished by: (1) Conducting facility visits of generators, (2) obtaining split sampling for confirmatory analysis, and/or (3) gathering other information.

Second, if the TSDF uses process descriptions and documented studies as acceptable knowledge, the data should be scrutinized carefully as to whether:

- There are any differences between the process in the study and the process used by the generator.
- The studies used are applicable.

These issues are of concern, for example, because EPA revised the criteria that qualify a waste as a hazardous waste due to meeting the toxicity characteristic. Not only were the number and type of constituents that could deem a waste hazardous modified but also the test for identifying these constituents was amended (i.e., the Toxicity Characteristic Leaching Procedure (TCLP) replaced the Extraction Procedure Toxicity Test (EP TOX Test).)

Therefore, if a TSDF has been using acceptable knowledge, it needs to review the waste analysis or waste characterization data to determine if it is managing any solid wastes that are now hazardous wastes. The TSDF needs to determine whether its existing data is sufficient to identify any new constituent concentrations limitation (i.e., demonstrate compliance with LDR requirements).

In addition, where documented studies are used as acceptable knowledge, the TSDF should determine whether the information is based on valid sampling and analytical techniques. Also, the ability of analytical equipment to detect low concentrations of contaminants has improved over the years, and constituents that once were determined to be "nondetectable" may, in fact, be detectable using the sophisticated equipment available today.

Although EPA recognizes that sampling and analysis is not as economical or convenient as using acceptable knowledge, it does have a number of advantages. Because accurate waste identification is such a critical factor for demonstrating compliance with RCRA, misidentification can render a facility liable for enforcement actions with respect to permit conditions, LDR requirements, annual reporting, and other RCRA requirements. In addition, accurate waste analysis is critical for meeting some of the requirements of other regulatory programs such as effluent discharges under the Clean Water Act, and transportation requirements regulated by the Department of Transportation.

5. Advance Notice of Possible Changes to the LDR Program Resulting From the LDR Roundtable

As was elaborated above in the section presenting background on the LDR Roundtable, EPA intends further review comments and recommendations made during the Roundtable and propose to incorporate them—where appropriate—into future LDR regulations. Below, some of the main problems and recommendations identified by Roundtable participants are briefly discussed. The recommendations are being presented in this proposed rule to solicit further comments that will be considered when developing possible revisions to existing LDR provisions in future rulemakings. Comment is solicited on each of the recommendations discussed above. More detailed information on the LDR Roundtable can be obtained by calling or writing the RCRA Docket and requesting the document "Summary of the Land Disposal Restrictions Evaluation Roundtable" found in the docket numbered F–92–CD2F–S0144.

a. Waste code carry through. One of the issues concerns the management of residuals from treating listed wastes. The waste codes for these wastes "carry through" to the treatment residual, even when the physical or chemical state of the waste has been modified. The Roundtable participants' recommendations included: (1) Dropping the waste code when the LDR treatment standards are met—groups contended that once standards are met for a waste, the waste code should be dropped from the residual so that legitimate mixing and other treatment could occur without retesting; (2) allowing the use of process knowledge to identify a short list of constituents in residuals for which analysis should be conducted; and (3) developing residual waste codes (as the Agency has done for multi-source leachate.)

b. Use of health-based levels versus technology-based levels in establishing treatment standards. A number of the participants suggested that the LDRs should be revised to allow materials to leave the hazardous waste (i.e., RCRA subtitle C) system—that is, the LDR treatment standards should be based on risk. Other participants recommended that EPA should consider socioeconomic factors and resource allocations during these risk evaluations. For further discussion, see Section II.H. Furthermore, it was also suggested that the Agency create a *de minimis* program to eliminate certain specific categories of small volume wastes from the LDR requirements. (This last alternative would, of course, likely require a statutory change.)

c. Inconsistency of standards. Some participants stated that requiring characteristic wastes to be treated below the characteristic level is inconsistent with the regulatory standards used for hazardous waste identification. Remedies included: (1) Capping treatment with risk-based levels; (2) implementing universal standards based on the least-stringent treatment standard; and (3) having EPA focus on hazardous compounds in wastes rather than on the existing set of waste codes, and establish technology-based treatment standards so that each compound would have a specific standard regardless of the waste in which it was found (such "universal standards" are proposed in section III.A of this preamble.)

d. Capacity-related issues. Participants cited a number of capacity-related concerns, including the lack of treatment capacity for highly-concentrated mercury waste, and insufficient treatment technologies to address ignitable, corrosive and reactive (ICR) wastes. With regard to mercury wastes, participants suggested EPA allow the low-level mercury treatment standard to be applied to high-level mercury wastes. For ICR wastes, the recommendation was to allow maximum flexibility concerning continued use of deactivation.

Furthermore, it was stated that the storage for greater than one year will occur for certain wastes because no treatment capacity exists (e.g., radioactive mixed wastes, mercury-bearing wastes not amenable to the current standards, PCBs, and dioxin-contaminated wastes.) (The 'one-year limitation' is, of course, a misnomer. Persons storing for over one year merely have the burden of showing they are storing waste in order to accumulate sufficient quantities to facilitate proper treatment or disposal. § 268.50(c).) Participants also indicated that the one-year storage limitation is a disincentive for waste minimization because the cost of disposal decreases as the volume of waste increases, and pollution prevention/waste minimization programs have created problems associated with generating sufficient waste for disposal. There is also confusion on the part of industry on what constitutes a good-faith effort to find treatment capacity. Possible solutions voiced included: (1) Guidance on what constitutes a good-faith effort to find treatment capacity; (2) streamlining capacity variance procedures; and (3) waste minimization storage allowances (e.g., EPA offering storage for greater than one year as a waste minimization incentive for non-permitted facilities.)

e. Generator knowledge. It was stated by a number of the participants that generator knowledge with respect to identifying constituents of concern in their hazardous waste was often rejected by TSDs, requiring testing by generators prior to acceptance of wastes for treatment or disposal. The one recommendation was to institute guidance on what the Agency considers sufficient written documentation to support a generator's knowledge of the waste. (The Agency is providing some guidance on this issue in section 4 above.)

f. Constituents. Conversely, a number of the participants stated that the Agency requires testing for too many constituents, presenting a cost burden to industry. Because generators are said to know the constituent content of their waste, it is unnecessary to test. Potential solutions to this problem included: (1)

Developing short, waste-specific, indicator constituent lists for testing; (2) initially testing the whole range of constituents, then testing again only if the waste stream changes; and (3) having EPA remove dioxins and furans from the F039 list due to the expense of analysis, while retaining the current standards for these compounds in F020–F023 and F026–F027.

g. Detection limits. Some participants maintained that some treatment standards are set at levels that may be below detection limits, creating obvious compliance difficulties. Recommendations included: (1) Allowing ranges in detection limits and in LDR treatment standards; (2) establishing LDR standards at levels that are not below detection limits; (3) use the practical quantitation limits (PQLs) as the default for matrix difficulties; (4) refining detection limits over time and allow the use of indicator compounds in difficult analyses; and (5) allowing the states and regions discretion when dealing with difficult matrices and standards.

h. Waste Analysis Plans (WAPs). The general problem voiced was that generators, treaters, disposers, and enforcement officials often obtain different analytical results for the same waste depending on the sampling (eg., grab versus composite samples), and the statistical or weighting methods employed, necessitating re-testing. Potential remedies included: (1) Developing WAP guidance to, among other things, minimize redundant testing and over-certification of wastes, and solicit comment on whether to specify WAP guidance at the time of promulgation of the rules; (2) having the Agency develop sampling guidance; (3) using composite sampling over grab sampling; (4) establishing mandatory quality control procedures; and (5) having the waste analysis plans rely more on generator knowledge.

i. Paperwork. In general it was felt that the paperwork requirements were too complicated. Some participants suggested that there is no longer a need for the LDR notification, and said that the separate LDR notification hampers inspections. Alternative options included: (1) Including the LDR notification on the manifest; (2) revising the LDR notification to exempt generators from informing the treater of the treatment standards applicable to the waste (EPA is proposing to make this change in this preamble at section 3 above); (3) creating a summary table of notification and certification requirements (included above in Table 1); and (4) solicit comment on reducing the number of years that records must be retained.

j. Complexity of the regulations. Most of the participants agreed that the preamble language is not consistently interpreted among government officials and that it is necessary to work with both the regulations and the preamble to understand what is required. Discussion in the groups pointed to the LDRs being difficult to understand, largely because the Codes of Federal Regulations (CFR) are quickly out of date; the preamble language contains significant guidance that is not always implicit in the regulatory language; and the treatment standards are found in the CFR in several tables. Recommendations included: (1) Developing consolidated treatment tables (this suggestion is being proposed in this notice, as discussed at section C.2 above); (2) having EPA develop a bulletin board to keep all involved parties informed of policy memoranda, scheduled briefings, and new rules; (3) having the Agency make inspector checklists available to the regulated community and hold workshops on compliance; (4) EPA physically reorganizing its regulations by incorporating part 268 into the generator and facility requirements (parts 262, 264 and 265); and, (5) having EPA expand preambles to include an implementation section, soliciting comment on implementation information during the development of the regulations (this is being implemented in this proposed rule in section XI.)

IV. Treatment Standards for Toxicity Characteristic Waste

A. The Third Third Court Decision, the Emergency Interim Final Rule, and Their Applicability to TC Wastes

In today's notice, EPA is proposing treatment standards for wastes displaying the toxicity characteristic (TC wastes) when the TC wastes are managed in systems other than: (1) In wastewater treatment systems which include surface impoundments and whose ultimate discharge is subject to the Clean Water Act (CWA); (2) in Class I non-hazardous underground injection wells subject to the Safe Drinking Water Act (SDWA) Underground Injection Control (UIC) program; or, (3) by a zero discharger who, before permanent land disposal of the wastewater, treats the wastewaters in a wastewater treatment system equivalent to that utilized by CWA dischargers. Consistent with the *Third Third Case*, the treatment standards proposed for these wastes include standards for "constituents subject to treatment" (i.e., any regulated constituent present at levels above the universal constituent-specific treatment standards at the point of generation of the TC waste).

This proposed approach is the same as that adopted in the recent interim final rule, promulgated on May 10, 1993 (published on May 24, 1993, 58 FR 29860) in response to the court's decision in *Chemical Waste Management* v. *EPA*, 976 F. 2d 2 (D.C. Cir. 1992). That case vacated and remanded certain Agency regulations (commonly referred to as the Third Third rule) establishing prohibitions and treatment standards for characteristic wastes, and also established rules as to when the prohibitions and standards would not apply.

This section provides a summary of the court's decision, an overview of the interim final rule published on May 24, 1993, and how the Agency proposes to apply this approach to the TC wastes.

1. Background

Among other things in the Third Third final rule, the Agency promulgated treatment standards and prohibitions for hazardous wastes that exhibited one or more of the following characteristics: Ignitability, corrosivity, reactivity, or EP toxicity (40 CFR 261.21–261.24). The Agency also evaluated the applicability of the LDR dilution prohibition to characteristic wastes, including characteristic wastes ultimately managed in wastewater management systems with land disposal units (i.e., impoundments or injection wells) which are subject to varying degrees of regulation under the CWA and SDWA. This was done in an effort to ensure the successful integration of these programs with the LDR regulations (see generally 55 FR 22653–59 (June 1, 1990)). Thus, except where the Agency specifically identified and required that hazardous constituents be treated, the rule indicated in essence that characteristic wastes need only be treated to remove the characteristic before land disposal where land disposal involved placement in surface impoundments whose ultimate discharge was subject to regulation under the CWA, or where the waste was injected into a Class I UIC well.

On September 25, 1992, the United States Court of Appeals for the District of Columbia Circuit ruled on various petitions for review of this rule. The principal holdings of the case with respect to characteristic wastes were that: (1) EPA may require treatment under RCRA section 3004(m) to more stringent levels than those at which wastes are identified as hazardous so

long as the level defining the waste as hazardous was above the level at which threats to human health and the environment are minimized, 976 F. 2d at 12–14; (2) section 3004(m) requires that treatment standards address both short-term and long-term potential harms posed by hazardous wastes, as well as removal of the characteristic property, *id.* at 16, 17, 23; as a consequence, dilution is permissible as an exclusive method of treatment only for those characteristic wastes that do not contain hazardous constituents "in sufficient concentrations to pose a threat to human health or the environment" (i.e., the minimize threat level in section 3004(m)), *id.* at 16; and, (3) situations where characteristic hazardous wastes are diluted, lose their characteristic(s) and are then managed in centralized wastewater management land disposal units (i.e., subtitle D surface impoundments or injection wells) are legal only if it can be demonstrated that hazardous constituents are reduced, destroyed or immobilized to the same extent as they would be pursuant to otherwise-applicable RCRA treatment standards, *id.* at 7.

As a consequence of these holdings, the court held that the deactivation treatment standard for ignitable and corrosive wastes (which allowed the hazardous characteristic to be removed by any type of treatment, including dilution) did not fully comport with RCRA section 3004(m). This was because that standard could be achieved by dilution, and section 3004(m) "* * * requires that any hazardous waste be treated in such a way that hazardous constituents be removed from the waste before it enters the environment." 976 F. 2d at 24.

In response to the court decision, EPA issued an emergency interim final rule with respect to those treatment standards that were vacated (as opposed to remanded) by the court (58 FR 29860, May 24, 1993). The distinction between vacated and remanded rules is that vacated rules are no longer in effect (once the court's mandate issues), whereas remanded rules remain in force until the Agency acts to replace them. This distinction has considerable significance with respect to LDR treatment standards. If there is no treatment standard for a prohibited waste (for example, as a result of a vacatur), that waste is prohibited from land disposal, because it has not been treated to meet the treatment standard established by EPA, and (presumably) is not being disposed in a no-migration unit. RCRA sections 3004 (d), (e), and (g)(5). A remanded treatment standard, on the other hand, would remain in effect, and disposal of prohibited wastes treated pursuant to that standard is legal until the standard is amended.

In the Agency's opinion, the rules dealing with centralized wastewater management involving land disposal (§§ 268.1(c)(3) and 268.3(b)) were remanded, not vacated. (See 976 F.2d at 7, 19–26 where these rules are discussed and not expressly vacated.) This means that the only wastes to which the interim final rule applied were those ignitable and corrosive wastes for which the treatment standard was deactivation (since the deactivation standard for these wastes was vacated) *and* which were managed in systems other than CWA, CWA-equivalent, or Class I UIC wells regulated under the SDWA.

The treatment standards promulgated in the interim final rule retained the requirement of deactivation to remove the hazardous characteristic; however, the rule also established numerical treatment standards for the underlying hazardous constituents that could be present in the wastes.

2. Applicability of This Approach to TC Wastes and Hazardous Soil Covered by This Proposed Rule

The Agency is today proposing the same approach adopted in the interim final rule for determining which hazardous constituents in TC wastes and hazardous soils to regulate and the types of treatment/disposal units covered. As with ignitable and corrosive wastes, the underlying hazardous constituents must be treated. The Agency believes that to do otherwise would be inconsistent with the court's holding that RCRA section 3004(m) requires that treatment standards address both short-term and long-term potential harms posed by hazardous wastes.

With respect to the units to be regulated, EPA is proposing to defer control of the same units not addressed by the interim final rule. Under that rule, the new treatment standards do not apply to ignitable or corrosive wastes managed in wastewater treatment systems whose ultimate discharge is subject to the CWA, Class I underground injection wells subject to the SDWA Underground Injection Control (UIC) program, and zero dischargers who, before final land disposal, treat wastewater with treatment equivalent to that utilized by CWA dischargers. CWA-equivalent treatment means biological treatment for organics, reduction of hexavalent chromium, precipitation/sedimentation for metals, alkaline chlorination or ferrous sulfate precipitation of cyanide (to the extent these constituents are present in the untreated influent to wastewater treatment systems), or treatment that the facility can show performs as well or better than these enumerated technologies. See § 258.37(a), 58 FR at 29885 (May 24, 1993).

EPA is proposing the same deferred coverage when these units are used to treat TC wastes. The Agency believes that it would be most appropriate to address all issues pertaining to such wastewater management operations at one time. Therefore, it is not addressing TC wastes managed in these systems in this rulemaking. They will be addressed in a later rulemaking, along with issues that pertain to the wastewater management facilities excluded from the interim final rule.

The treatment standards being proposed today for TC wastes would apply, however, when these wastes are injected into other than Class I wells (e.g., Class V shallow injection wells), even if the wastes were rendered noncharacteristic ("decharacterized") first. The exception to the dilution prohibition of the Third Third Final Rule never applied to other than Class I nonhazardous injection wells. This means that today's proposed requirements will apply to some injection practices, in particular, those involving Class V injection wells. These typically are wells injecting nonhazardous wastes above or into underground sources of drinking water. (If, however, the TC wastes injected into non-Class I wells were to be treated by CWA-equivalent means before injection, the proposed treatment standards would not apply. This is an example of the type of zero discharger referred to above.) The Agency solicits comments and data on volumes of TC wastes managed in Class V injection wells, and on waste management practices employed prior to injection.

The TC wastes covered by this rule have been, and will continue to be, managed in combustion devices or be stabilized. Upon promulgation of a final rule, such facilities must treat the wastes to meet the treatment standard for the TC waste—including standards for any underlying hazardous constituents—prior to land disposal.

3. Future Response to Issues Remanded by the Court

The Agency plans to address the issues having to do with CWA and CWA-equivalent wastewater management systems and injection into Class I injection wells in future rulemakings. For example: (1) Direct dischargers managing decharacterized wastes in surface impoundments; (2) indirect dischargers managing

decharacterized wastes in surface impoundments; (3) zero dischargers (including those injecting into non-Class I injection wells) who perform CWA-equivalent treatment before ultimate disposal; and (4) persons injecting decharacterized wastes into Class I deep injection wells will be subject to regulation in the future when the Agency addresses remanded issues from the *Third Third Case*. See 58 FR at 29860, May 24, 1993 explaining the basis for these categorizations.

Many of these remanded issues are significantly more complex than those dealt with in the interim final rule and in today's proposed rule. In addition, the universe of facilities affected by the remanded portions of the Third Third rule is much broader than that covered in either of these rules, as it will include (among other things) treatment systems regulated under the CWA, Class I nonhazardous injection wells regulated under the SDWA, plus zero discharge facilities that engage in treatment that is equivalent to that of CWA dischargers. Furthermore, the volumes of wastes affected by the remanded rules are much greater than those at issue in this regulation and the interim final rule.

Options for addressing these remanded issues with respect to ignitable, corrosive, and reactive characteristic wastes were presented in the Supplemental Information Report prepared for the January 19, 1993 Notice of Data Availability (58 FR 4972), available in the RCRA docket. EPA expects that most of the issues discussed there will also apply to TC wastes when treatment standards are promulgated. The following discussion summarizes many of the issues raised in the Supplemental Information Report.

It is clear that the court intended for the Agency to revise the special dilution provisions for management in a CWA facility (§ 268.3(b)) and in SDWA Class I injection wells (§ 268.1(c)(3)), because it specified that dilution alone is not adequate treatment if an ignitable, corrosive, and reactive waste contains hazardous constituents at levels above those the Agency finds minimize threats. This will greatly impact the injection of these wastes (and, potentially, TC wastes) in Class I nonhazardous deep wells, since there are few treatment systems currently in place upstream of the injection well that could treat the underlying hazardous constituents that are present. Such facilities seem to have few options for dealing with the court's decision: undertaking substantial waste minimization efforts; installing on-site treatment systems; arranging for off-site transport and treatment; or, applying for, and being granted, a no-migration petition that would allow continued land disposal of untreated wastes. Although commenters on the Supplemental Information Report suggested that EPA could promulgate a rule that does not require treatment of the underlying hazardous constituents, based on a generic finding that injection is a protective practice, the Agency's tentative view is that this is not a viable option (see Supplemental Information Report, pp. 25–7). However, the Agency seeks additional comment on the technical and legal issues raised in Notice of Data Availability and Supplemental Options Report as they may pertain to TC wastes.

Probably the most significant issue for CWA wastewater treatment facilities will be that of determining the equivalency of CWA treatment systems with RCRA LDR treatment. Associated issues such as whether the court opinion authorizes controls on leakage or volatilization from treatment surface impoundments, or whether sludges generated in impoundments must be treated, will be particularly controversial and will take time to resolve. Comments are solicited on these issues as they pertain to treatment of TC wastes.

4. Request for Comment on Petition From Chemical Manufacturer's Association Regarding Deep Well Injection of Ignitable and Corrosive Characteristic Wastes

In the May 24, 1993 interim final rule for ignitable and corrosive wastes managed in other than wastewater treatment systems whose ultimate discharge is subject to the CWA, in other than Class I underground injection wells subject to the SDWA UIC program, and by zero dischargers who do not treat wastewater with treatment equivalent to that utilized by CWA dischargers, the Agency discussed plans for future rulemakings covering those ignitable and corrosive wastes disposed in such units. As part of its response to May 24 interim final rule, the Chemical Manufacturers' Association (CMA) requested that the Agency develop treatment standards intended for those wastes disposed in Class I deep injection wells. CMA specifically requested the Agency to promulgate treatment standards for ignitable and corrosive wastes managed by deep well injection that, in view of the unique circumstances of deep well injection, meet the statutory "minimize threats" standard. Consequently, the Agency has placed CMA's petition in the docket and is soliciting comment on the petition.

B. Background

1. Legal and Policy Background

One of the key issues in the Third Third rule was whether characteristic wastes must be treated to a lesser extent than listed wastes. This result could come about because, under Agency regulations, characteristic wastes stop being "hazardous wastes" at the point they stop exhibiting the characteristic property. § 261.3(b). However, if treatment of characteristic wastes must cease at the point they are no longer hazardous wastes, any underlying hazardous constituents (hazardous constituents other than those for which the waste exhibits the characteristic) can go untreated. 55 FR at 22652 (June 1, 1990). Moreover, at that time, the Agency viewed the characteristic level as higher than the "minimize threat" level required for treatment of hazardous wastes by section 3004(m). *id.*

The Agency consequently took the position that Congress did not compel less treatment for characteristic wastes than for listed wastes (or, put another way, did not compel non-treatment of underlying hazardous constituents, treatment only to characteristic levels, or dilution to meet treatment standards for characteristic wastes.) *id.* at 22652–58. The Agency established this principle by stating that if a waste is hazardous at the point it is generated, the obligation to treat to section 3004(m) levels attaches at that point, whether or not the waste still exhibits a characteristic at the point it is disposed. *id.*

Reviewing this rule, the D.C. Circuit upheld the point of generation principle; however, it also invalidated some of the discretion EPA had asserted in whether to apply it. 976 F. 2d at 7, 13–14, 23, 25–6. The Agency is, of course, bound by this opinion, and today's proposal for TC wastes reflects the Agency's view of what the opinion requires in establishing treatment standards for characteristic wastes. Further discussion of the opinion, in particular, when different parts of the opinion start to apply, is found in the interim final rule promulgated on May 10, 1993 (58 FR 29860, May 24, 1993), as well as the preceding section of this preamble.

Today's rule consequently proposes treatment standards for TC wastes which standards are not constrained by the characteristic level, that prevent the standard from being achieved by dilution (albeit issues related to most types of land-based centralized wastewater management are not being addressed in this proposal), and which

require treatment of the underlying hazardous constituents.

With respect to treatment below characteristic levels, section 3004(m) of RCRA states that treatment standards must substantially diminish the waste's toxicity or mobility so that short-term and long-term threats posed by the waste are minimized. See 55 FR at 22654 (June 1, 1990). EPA has noted that the EP/TC limits are levels at which wastes clearly are hazardous. 45 FR 33084 (May 19, 1980); 51 FR 21648 (June 13, 1986); See 55 FR 11798 (March 27, 1990). EPA thus believes that further treatment below a characteristic level may be necessary before threats to human health and the environment are "minimized" within the meaning of section 3004(m). See 55 FR at 22654 (June 10, 1990). For some of the TC wastes addressed in today's rule, the concentration-based treatment standards are consequently lower (i.e. more stringent) than the regulatory levels that establish those wastes as characteristically hazardous.

Dilution rules are intended to prohibit dilution in lieu of treatment and to ensure that hazardous constituents are destroyed or removed by treatment. *Third Third Case*, 976 F. 2d at 16, 28. EPA is consequently proposing that it is impermissible to achieve the treatment standards for TC wastes by means of dilution. (As stated above, however, EPA is not addressing in this rule the management of TC wastes in land-based centralized wastewater management systems that were not included within the scope of the recent emergency rule. The court remanded these issues in the *Third Third Case (id.)*, leaving in place existing regulations that allow dilution in such systems).

Also, as described earlier, EPA is proposing treatment standards for the hazardous constituents that can be present in treatable concentrations in TC wastes, but which are not the basis for causing the waste to be identified as hazardous (for example, lead present at less than TC levels, but present at levels exceeding treatable concentrations and exceeding LDR levels, in a waste that exhibits the TC because of benzene). The Agency is proposing the same types of monitoring rules for these constituents recently adopted in the emergency rule, so that (in essence) monitoring for hazardous constituents is limited to those reasonably expected to be present in the wastes.

The Agency requests comments, generally, on mechanisms that may be used to streamline the compliance monitoring requirements under the LDR program. For example, for TC wastes that contain organic underlying hazardous constituents, incineration may destroy not only the TC constituent but the underlying organic hazardous constituents present at lower concentrations than the TC concentration. Comments are solicited on the need to monitor the residual ash for compliance with the treatment standards for the underlying organic hazardous constituents, if the treatment standard for the TC constituent has been met. The Agency solicits specific data that demonstrate that alternative monitoring requirements would provide adequate assurance that all treatment standards are met.

2. Background on Toxicity Characteristic

On March 29, 1990, EPA revised 40 CFR 261.24—the Toxicity Characteristic or "TC"—replacing the extraction procedure (EP) with the toxicity characteristic leaching procedure (TCLP). This rule also increased the number of hazardous constituents regulated under this characteristic from 14 to 40. These TC wastes are newly identified wastes for the purpose of developing land disposal restrictions (LDRs). See section 3004(g)(4). They fall into three categories for purposes of the LDR program. The first category consists of new organic constituents and includes all wastes identified as D018–D043. Today's proposal would establish treatment standards for D018 through D043 wastes when they are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems. The second and third categories consist of those D004–D011 metal wastes and D012–D017 pesticide wastes that are now hazardous based on TCLP analysis rather than EP analysis. EPA established treatment standards in the Third Third final rule for these wastes if they exhibit both the TC (because they had to be hazardous waste) and the EP (because only EP wastes were covered by the Third Third prohibition). Today's rule establishes treatment standards for the TC pesticide wastes that do not exhibit the EP characteristic. EPA is not proposing treatment standards for the TC organic and pesticide wastewaters that are managed in CWA facilities or facilities that engage in CWA-equivalent treatment prior to land disposal or in Class I injection wells, or for TC metal wastes (D004–D011). Such standards will be proposed in a later rule.

EPA is soliciting information that may be used to characterize industrial generation patterns to assess the potential for source reduction or recycling for these TC wastes. While source reduction and recycling are high priorities for any hazardous waste, the wide diversity of these TC wastes is expected to impact EPA's ability to evaluate source reduction and recycling. (See also EPA's general solicitation for information on pollution prevention opportunities in section I.B. above).

C. Treatment Standards for New TC Organic Constituents

D018—Benzene
D019—Carbon tetrachloride
D020—Chlordane
D021—Chlorobenzene
D022—Chloroform
D023—o-Cresol
D024—m-Cresol
D025—p-Cresol
D026—Cresol
D027—1,4-Dichlorobenzene
D028—1,2-Dichloroethane
D029—1,1-Dichloroethylene
D030—2,4-Dinitrotoluene
D031—Heptachlor
D031—Heptachlor epoxide
D032—Hexachlorobenzene
D033—Hexachloro-1,3-butadiene
D034—Hexachloroethane
D035—Methyl ethyl ketone
D036—Nitrobenzene
D037—Pentachlorophenol
D038—Pyridine
D039—Tetrachloroethylene
D040—Trichloroethylene
D041—2,4,5-Trichlorophenol
D042—2,4,6-Trichlorophenol
D043—Vinyl chloride

1. General Approach for Establishing Concentration-Based Treatment Standards

Treatment standards established under the land disposal restrictions (LDR) program are based on performance of the best demonstrated available technology (BDAT) for treating a waste. Under EPA's procedure for establishing treatment standards, the Agency establishes concentration-based treatment standards with compliance measured through a total waste analysis as the best measure of destruction or extraction (typically BDAT for organics), or establishes concentration-based treatment standards with compliance measured through analysis of the TCLP leachate, as the best measure of metal treatment. The Agency generally specifies treatment technologies only for those situations where there are no analytical methods to measure compliance with a concentration-based treatment standard.

a. Nonwastewaters. The Agency is today proposing concentration-based treatment standards for nonwastewater TC organic wastes based on existing treatment data that were used to establish treatment standards for these same constituents in listed wastes. The proposed standards are presented at the end of this section. The treatment

standards proposed today are at the same levels as those proposed as universal standards in a separate part of today's rule.

The concentration-based treatment standards being proposed are primarily based on incineration data. The Agency believes, however, these proposed treatment standards can also be met by a number of other treatment technologies. (See discussion in section III.A of this preamble for more information about these proposed treatment standards). In fact, the Agency has some data on the treatment of these constituents by innovative technologies (i.e., solvent extraction, thermal desorption) that support the levels being proposed today.

The treatment technologies typically used for organic nonwastewaters (e.g., incineration, thermal desorption, solvent extraction) tend to destroy or extract the organics to a highly efficient degree. Thus, setting standards based on these treatment data may result in hazardous constituents being removed from the waste before disposal.

The *Third Third Case* directs EPA to ensure that the hazardous constituents in characteristic waste are adequately treated. Many TC organic nonwastewaters contain hazardous constituents in addition to those constituents which caused the waste to be identified as a hazardous TC waste; for example, a waste which is classified as TC hazardous waste because of its benzene concentration may also contain lead at levels of concern although not characteristically hazardous for lead, or may contain non-TC hazardous constituents. (Standards for these hazardous constituents would also be based on the universal treatment standards, since these are virtually identical to standards for F039, the basis for the standards included in the May 10 emergency interim final rule).

PROPOSED BDAT STANDARDS FOR TC ORGANIC WASTES

[Nonwastewaters]

Code	Regulated constituent	Maximum for any single grab sample
		Total composition (mg/kg)
D018	Benzene	10
D019	Carbon tetrachloride.	6.0
D020	Chlordane	0.26
D021	Chlorobenzene	6.0
D022	Chloroform	6.0
D023	o-Cresol	5.6
D024	m-Cresol	3.2
D025	p-Cresol	3.2
D026	Cresol	5.6

PROPOSED BDAT STANDARDS FOR TC ORGANIC WASTES—Continued

[Nonwastewaters]

Code	Regulated constituent	Maximum for any single grab sample
		Total composition (mg/kg)
D027	1,4-Dichlorobenzene	6.0
D028	1,2-Dichloroethane	6.0
D029	qxl1,1-Dichloroethylene.	6.0
D030	2,4-Dinitrotoluene	140
D031	Heptachlor	0.066
D031	Heptachlor epoxide.	0.066
D032	Hexachlorobenzene	10
D033	Hexachloro-1,3-butadiene.	5.6
D034	Hexachloroethane	30
D035	Methyl ethyl ketone	36
D036	Nitrobenzene	14
D037	Pentachlorophenol	7.4
D038	Pyridine	16
D039	Tetrachloroethylene	6.0
D040	Trichloroethylene	6.0
D041	2,4,5-Trichlorophenol	7.4
D042	2,4,6-Trichlorophenol	7.4
D043	Vinyl Chloride	6.0

b. Wastewaters. In today's notice, EPA is proposing treatment standards for newly identified TC wastewaters that are managed in systems other than those regulated under the CWA, those regulated under the SDWA that inject TC wastewaters into Class I injection wells, and those zero discharge facilities that engage in CWA-equivalent treatment prior to land disposal. The proposed treatment standards for newly identified TC wastewaters would require treatment to meet the universal treatment standards for the TC constituent and for the underlying hazardous constituents.

BDAT STANDARDS FOR TC ORGANICS

[Wastewaters]

Constituent	Maximum for any single grab sample
	Total composition (mg/l)
D018—Benzene	0.014
D019—Carbon tetrachloride	0.057
D020—Chlordane	0.0033
D021—Chlorobenzene	0.057
D022—Chloroform	0.046
D023—o-Cresol	0.11
D024—m-Cresol	0.77
D025—p-Cresol	0.77
D026—Cresol	0.88
D027—1,4-Dichlorobenzene	0.09
D028—1,2-Dichloroethane	0.21
D029—1,1-Dichloroethylene	0.025
D030—2,4-Dinitrotol- uene	0.32
D031—Heptachlor	0.0012
D031—Heptachlor epoxide	0.016
D032—Hexachlorobenzene	0.055
D033—Hexachloro-1,3-butadiene	0.055
D034—Hexachaloroethane	0.055
D035—Methyl ethyl ketone	0.28
D036—Nitrobenzene	0.068
D037—Pentachlorophenol	0.089
D038—Pyridine	0.014
D039—Tetrachloroethylene	0.056
D040—Trichloroethylene	0.054
D041—2,4,5-Trichlorophenol	0.18
D042—2,4,6-Trichlorophenol	0.035
D043—Vinyl Chloride	0.27

2. Radioactive Mixed Waste

Radioactive mixed wastes are those wastes that satisfy the definition of radioactive waste subject to the Atomic Energy Act (AEA) that also contain waste that is either listed as a hazardous waste in subpart D of 40 CFR part 261, or that exhibit any of the hazardous waste characteristics identified in subpart C of 40 CFR part 261. Since the hazardous portions of the mixed waste are subject to RCRA, the land disposal restrictions apply. This means that the RCRA hazardous portion of all mixed waste must meet the appropriate treatment standards for all applicable waste codes before land disposal. In the case of these organic TC wastes, any radioactive waste mixed with organic TC wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA facilities would have to meet the

promulgated treatment standards for the TC waste.

For the most part, the low concentrations of radioactive compounds should not interfere with the treatability of the hazardous constituents in the waste. Therefore, the standards being proposed for TC wastes are also being proposed for TC radioactive mixed wastes. The Agency is requesting data where this is not the case. The Department of Energy (DOE) has expressed some concerns about meeting certain treatment standards. DOE is currently collecting data from their facilities on mixed TC wastes. They are welcome to submit these data as part of this rulemaking, and the data will be placed in the RCRA docket for public review. The EPA will analyze these data along with all other data received on TC wastes, and consider them in promulgating final treatment standards.

D. Treatment Standards for TC Pesticide Wastes (D012–D017)

D012—Endrin
D013—Lindane
D014—Methoxychlor
D015—Toxaphene
D016—2,4-D
D017—2,4,5-TP (Silvex)

In the final rule for the Third Third wastes (55 FR 22520), EPA promulgated treatment standards for D012–D017 wastes, but only for those wastes that were hazardous by both the TCLP and the EP leaching procedures. Wastes that were not hazardous by the EP leaching procedure, but hazardous by the TCLP, are newly identified D012–D017 wastes and are currently not prohibited. EPA is proposing treatment standards for D012–D017 wastes managed in non-CWA/non-CWA-equivalent/non-Class I SDWA facilities in this notice. EPA is also proposing revised treatment standards for pesticide wastewaters, as explained below.

1. Newly Identified Pesticide Nonwastewaters

There is no reason to think these wastes cannot meet the existing treatment standards for D012–D017 nonwastewaters (55 FR 22554). Therefore, EPA is proposing that the existing treatment standards apply to newly identified D012–D017 nonwastewaters. (It should be noted that EPA determined that the amount of D012–D017 waste subject to the treatment standards is very small. 55 FR at 22634, 22646. Based on this determination, it is very unlikely that newly identified D012–D017 are being generated).

The Agency is also proposing to prohibit dilution of D012 and D017 nonwastewaters injected into Class I deep injection wells. If this prohibition on dilution before Class I injection is promulgated, these pesticide wastes must be treated to meet the treatment standards before they can permissibly be injected into such units, unless that unit has been granted a no-migration determination. See section IV.E which follows for more discussion on the proposed dilution prohibition for these and certain ignitable wastes.

2. Pesticide Wastewaters

EPA set treatment standards expressed as required methods of treatment for the EP toxic pesticide wastewaters in the Third Third final rule (55 FR 22554). EPA is not proposing to revise the treatment standards for pesticide wastewaters in today's rule. (See 268.40)

PROPOSED BDAT STANDARDS FOR PESTICIDES

[Nonwastewaters]

Code	Regulated constituent	Maximum for any single grab sample: Total composition (mg/kg)
D012	Endrin	.13
D013	alpha-BHC	.066
D013	beta-BHC	.066
D013	gamma-BHC	.066
D013	delta-BHC	.066
D014	Methoxychlor	.18
D015	Toxaphene	2.6
D016	2,4-D	10
D017	2,4,5-TP (Silvex)	7.9

E. Proposed Exemptions for De Minimis Losses of TC Wastes and for TC Laboratory Wastes Discharged to CWA Wastewater Treatment

The Agency is proposing to extend the exemptions established in the May 24, 1993 emergency interim final rule to TC organic wastes (58 FR 29860). Thus *de minimis* losses of TC organic wastes and TC organic laboratory wastes discharged to CWA wastewater treatment systems would not be subject to the requirements of 40 CFR part 268. (See proposed § 268.1 in today's rule.)

V. Deep Well Injection Issues

A. Prohibition of Dilution of High TOC Ignitable and of TC Pesticide Wastes Injected Into Class I Deep Wells

In the Third Third rule, EPA determined that decharacterized wastes could permissibly be injected in Safe Drinking Water Act Class I nonhazardous deep injection wells (wells that dispose of wastewaters deep below the lowermost underground source of drinking water) without first being treated to meet the treatment standard for the waste. See 55 FR at 22658 and § 268.1(c)(3). EPA indicated that so long as wastes that exhibit a characteristic at the point they are generated no longer exhibit a characteristic when disposed in a Class I deep injection well, they are not prohibited from land disposal. EPA took that position because the Agency believed that the deep injection of such wastewaters was an environmentally sound and technically effective waste management practice, and consequently that disposal of decharacterized wastes in Class I deep injection wells would not pose hazards to drinking water or to human health. *Id.*

As described previously, this determination was remanded by the D.C. Circuit. The court said, in essence, that not only must characteristic wastes be treated to destroy or remove hazardous constituents before land disposal, but that no deviation from this principle (pursuant to RCRA section 1006) was acceptable for underground injection practices because these practices were a type of permanent land disposal (as opposed to temporary land disposal incident to treatment in units that are part of Clean Water Act treatment systems). 976 F.2d at 25–6. Although the Agency is still evaluating its interpretation of this part of the opinion, the Agency has indicated (at least initially) that the most likely reading is that the available alternatives for decharacterized wastes being injected in Class I nonhazardous deep wells is for either these wastes to be treated to meet the treatment standard before injection (which option may involve segregation of wastes exhibiting characteristics at the point they are generated), or apply for and obtain a no-migration variance for the injection well. See 58 FR 4972, January 19, 1993 and 58 FR 29860, May 24, 1993. The treatment standards that apply to these wastes are found in the proposed treatment table found at § 268.40 of this rule. For D001 High TOC ignitables, the treatment standard is expressed as methods of treatment that must be used prior to land disposal: Fuel substitution,

solvent recovery or incineration. The treatment standards for EP pesticide wastewaters are also expressed as methods: Biodegradation or incineration. The treatment standards for EP pesticide nonwastewaters are expressed as levels that may be achieved by using any treatment technology.

EPA is proposing today to exclude two types of wastes from the portion of the rule (§ 268.1(c)(3)) that allows the waste to be injected into a Class I deep injection well if it no longer exhibits a characteristic when it is injected. The two types of waste are nonwastewaters that at the point of generation exhibit the characteristic of ignitability and contain greater than 10 percent Total Organic Carbon ("high TOC ignitable liquids subcategory") and TC toxic halogenated pesticide wastes (D012–D017). The Agency is singling out these wastes not only because of the court's mandate in the *Third Third Case*, but because the Agency believes that treatment of these wastes is a preferred management approach for them. (Indeed, the Agency had already singled these wastes out from the exception that allowed dilution of characteristic wastes that were to be managed in Clean Water Act treatment systems including land disposal units, § 268.3(b) and 55 FR at 22657). High TOC ignitable nonwastewaters contain high concentrations of organics that can either be recovered directly for reuse, or that can be burned for energy recovery. Treatment, consequently, not only eliminates the hazardous constituents in these wastes but utilizes recoverable resources in the wastes. The prohibited pesticide wastes contain a number of particularly toxic hazardous constituents (such as toxaphene, 2,4-D, and (in some cases) dioxins and furans) that warrant destruction or removal before land disposal. See generally 55 FR at 22657 and the waste management hierarchy in RCRA section 1003(6).

In addition, these wastes are not injected in significant volumes, so that redirection of the wastes to treatment technologies will not have any significant impact on well operators. (Although the issue of adverse impact on injection practices is ultimately "irrelevant" to determining how to apply prohibitions to underground injection practices, see 976 F. 2d at 26, the issue is relevant (at least to some extent) in determining how quickly EPA responds to the issues remanded by the court). In fact, as a worst case, the information the Agency gathered for the Third Third rulemaking indicated that a maximum of 6.9 million gallons of point of generation D001 ignitable wastes were injected in Class I nonhazardous deep injection wells annually. That same data set also indicated that all wastewaters which exhibit the toxicity characteristic for halogenated pesticide content (D012–D017) at the point they are generated totaled approximately 15 million gallons annually. The most recent information used for capacity determination in this proposed rule indicate that these injected volumes are, in fact, much lower. However, even the largest potential volumes are relatively small for Class I underground injection well waste streams.

EPA is not proposing to grant a national capacity variance for either of these waste types. There is approximately one-half million tons (i.e., approximately 120 million gallons) of available alternative treatment capacity for these liquid wastes. This treatment capacity is large compared to even the largest potential injected waste volumes; however, a three month capacity variance is proposed for the other wastes included in this proposed rule, in order that generators have time to locate and arrange for treatment of their wastes (see section XII for more information about capacity variances). This three-month variance would also apply to the prohibition of dilution of high TOC ignitable and TC pesticide wastes when they are injected into Class I wells.

The Agency is requesting any and all information regarding volumes, facilities, and properties of these wastes being injected in Class I nonhazardous deep wells in order to make a final determination on these issues.

B. Request for Comment on Petition From Chemical Manufacturer's Association Regarding Deep Well Injection of Ignitable and Corrosive Characteristic Wastes

In the May 24, 1993 interim final rule for ignitable and corrosive wastes managed in other than wastewater treatment systems whose ultimate discharge is subject to the CWA, in other than Class I underground injection wells subject to the SDWA UIC program, and by zero dischargers who do not treat wastewater with treatment equivalent to that utilized by CWA dischargers, the Agency discussed plans for future rulemakings covering those ignitable and corrosive wastes disposed in such units. As part of its response to May 24 interim final rule, the Chemical Manufacturers' Association (CMA) requested that the Agency develop treatment standards intended for those wastes disposed in Class I deep injection wells. CMA specifically requested the Agency to promulgate treatment standards for ignitable and corrosive wastes managed by deep well injection that, in view of the unique circumstances of deep well injection, meet the statutory "minimize threats" standard. Consequently, the Agency has placed CMA's petition in the docket and is soliciting comment on the petition.

VI. Treatment Standards for Newly Listed Wastes

A. Treatment Standards for Coke By-Product Production Wastes

K141—Process residues from the recovery of coal tar, including but not limited to tar collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087, decanter tank tar sludge from coking operations.

K142—Tar storage tank residues from the production of coke from coal or the recovery of coke by-products produced from coal.

K143—Process residues from the recovery of light oil, including but not limited to those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.

K144—Wastewater treatment sludges from light oil refining, including but not limited to intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.

K145—Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

K147—Tar storage tank residues from coal tar refining.

K148—Residues from coal tar distillation, including but not limited to still bottoms.

The Agency recently promulgated the listing of K141, K142, K143, K144, K145, K147, and K148 as hazardous wastes (August 18, 1992 (57 FR 37284)). These seven wastes are generated in the production, recovery, and refining of coke and coke by-products produced from coal. EPA estimates that there are approximately thirty-four facilities in the United States generating these wastes. Greater details on the description and generation of these wastes can be found in the listing rule and in the technical background document supporting that rule.

The final listing rule also describes certain recycling scenarios in which these materials are excluded from the definition of solid wastes (i.e., they are not listed as K141, K142, K143, K144, K145, K147, and K148). This occurs when these materials are recycled in one of three ways: Combined with coal feedstock residue as it is charged into the coke oven; added to the tar recovery process; or mixed with coal tar before this coal tar is sold as a product or further refined. See 57 FR 37285, 37297–37299 (August 18, 1992) for specific details of these conditions.

Under such conditions, since they are not the listed wastes, the proposed land disposal restrictions in today's rule for K141–K145, K147, and K148 would not apply.

1. Proposed Treatment Standards

In general, these waste streams consist primarily of organics with a minimum amount of water. Many are quite viscous and have the consistency of semisolids or sludges. With respect to hazardous organics, these wastes typically contain thousands of ppm of polynuclear aromatic compounds and hundreds of ppm of phenols, benzenes, and other single-ring aromatic compounds.

Because of their highly organic nature, EPA has determined that thermal destruction technologies, such as incineration or fuel substitution, represent BDAT for these wastes. While extraction technologies, such as thermal desorption and critical fluid extraction, appear to be potentially applicable, EPA currently lacks data verifying their performance on wastes similar to K141, K142, K143, K144, K145, K147, and K148. If these technologies can achieve the levels of performance (i.e., comply with the concentrations) of the proposed treatment standards, they could also be considered to be BDAT.

While most of these wastes, as generated, would be classified as "nonwastewaters" according to definitions applicable to the land disposal restrictions (40 CFR 268.2 (d) and (f)), EPA nevertheless sets treatment standards for wastewater forms as well as nonwastewater forms of these wastes on a waste code-basis. Even though the listing of these seven wastes does not specifically include wastewaters, if water or wastewater comes in contact with these wastes (such as during storage, treatment, or disposal), a wastewater form of these wastes would be generated that would have to comply with the treatment standards (provided the waste was to be placed in a land disposal unit).

As a result, EPA is proposing treatment standards for both wastewater and nonwastewater forms of K141, K142, K143, K144, K145, K147, and K148 wastes which are numerically equivalent to the universal standards proposed for the constituents selected for regulation in these wastes. The development of these standards is presented in the BDAT background document for these wastes located in the administrative docket for today's rule. EPA is proposing maximum concentration limits for benzene, naphthalene, and six polynuclear organics in both wastewaters and nonwastewaters. The tables at the end of this section list, by waste form, the proposed standards for each constituent and indicate the constituents that are regulated in each waste code. The proposed nonwastewater standards are based on the limits of analytical detection of these eight compounds in incineration ash residues. EPA has data from the incineration of fourteen vastly different, difficult to treat hazardous wastes indicating that these standards should be achievable on a routine basis for most hazardous wastes. The proposed wastewater standards reflect the performance of industrial wastewater treatment systems as documented in several of EPA's Office of Water and Risk Reduction Engineering Laboratory databases and presented in Volume C of the Final BDAT Background Document for U and P Wastes and Multi-Source Leachate available in the Third Third rulemaking docket.

2. Potential Future Revisions to Treatment Standards for Existing Coking Wastes K087, K060, and K035

In response to the rulemaking for Third Third wastes, the Hazardous Waste Treatment Council submitted data that they believe indicate that treatment standards for certain constituents (e.g., benzene) in other coking wastes, namely K087, K060, and K035, cannot be achieved on a regular basis in ash residues from the incineration of other types of hazardous wastes. (Note: The proposed nonwastewater standard for benzene in K141, K142, K143, K144, K145, K147, and K148 in today's rule is not transferred from K087, K060, or K035). The Agency agrees that when K087, K060, and K035 nonwastewaters are commingled with other wastes prior to treatment (such as the new coking wastes) the promulgated standards for those nonwastewaters may not always be achievable (primarily the benzene nonwastewater standard for K087 and K060). The Agency has not, however, received any requests for a treatability variance for any of these three wastes (i.e., K087, K060, and K035) nor has it been notified that any particular generator has had a problem complying with the standards. EPA believes that this is primarily because these wastes are no longer generated or generate no residues when treated, and there is, therefore, no demand for treatment. The Agency is, nevertheless, soliciting comment from generators on whether they have been unable to get their K087, K060, and K035 wastes treated because treatment standards could not be achieved or verified. The Agency requests any additional comment or information that would assist in determining whether the standards for these three wastes need to be revised.

PROPOSED BDAT STANDARDS FOR K141, K142, K143, K144, K145, K147, AND K148

[Nonwastewaters]

Constituent	Maximum for any single grab sample	Constituents regulated for waste codes						
	Total composition (mg/kg)	K141	K142	K143	K144	K145	K147	K148
Benzene	10.0	X	X	X	X	X	X	
Benz(a)anthracene	3.4	X	X	X	X	X	X	X
Benzo(a)pyrene	3.4	X	X	X	X	X	X	X
Benzo(b)fluoranthene [1]	6.8	X	X	X	X		X	X
Benzo(k)fluoranthene [1]	6.8	X	X	X	X		X	X
Chrysene	3.4	X	X	X	X	X	X	X
Dibenz(a,h)anthracene	8.2	X	X		X	X	X	X
Indeno(1,2,3-cd)pyrene	3.4	X	X				X	X
Naphthalene	5.6					X		

[1] This standard represents the sum of the concentrations for each of this pair of constituents.

PROPOSED BDAT STANDARDS FOR K141, K142, K143, K144, K145, K147, AND K148

[Wastewaters]

Constituent	Maximum for any single grab sample	Constituents regulated for waste codes						
	Total composition (mg/l)	K141	K142	K143	K144	K145	K147	K148
Benzene	0.14	X	X	X	X	X	X	
Benz(a)anthracene	0.059	X	X	X	X	X	X	
Benzo(a)pyrene	0.061	X	X	X	X	X	X	X
Benzo(b)fluoranthene	[1] 0.11	X	X	X	X		X	X
Benzo(k)fluoranthene	[1] 0.11	X	X	X	X		X	X
Chrysene	0.059	X	X	X	X	X	X	X
Dibenz(a,h)anthracene	0.055	X	X		X	X	X	X
Indeno(1,2,3-cd)pyrene	0.0055	X	X				X	X
Naphthalene	0.059					X		

[1] This standard represents the sum of the concentrations for each of this pair of constituents.

B. Treatment Standards for Chlorotoluenes

K149—Distillation bottoms from the production of alpha (methyl) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)

K150—Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha (methyl) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

K151—Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha (methyl) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides and compounds with mixtures of these functional groups.

The Agency recently promulgated the listing of K149, K150, and K151 as hazardous wastes on October 15, 1992 (57 FR 47377). These three wastes are generated in the production of chlorinated toluenes and include both ring-chlorinated toluenes (where the chlorine atoms are attached to the aromatic ring) and methyl-chlorinated toluenes (where the chlorine atoms are attached to toluene's methyl moiety). EPA estimates that there are four facilities in the United States generating these wastes. Greater details on the description and generation of these wastes can be found in the final listing rule and in the technical background document supporting that rule.

K149 and K150 waste streams are typically generated as organic liquids. Any aqueous phase that may be present in these streams is expected to be extremely acidic; therefore, both streams could potentially be hazardous by the characteristic of corrosivity (i.e., D002). With respect to hazardous organics, both of these wastes contain thousands of ppm of chlorinated aromatic and chlorinated aliphatic compounds. In fact, K149 wastes can contain up to 10 percent benzotrichloride. K151 wastes include a variety of solid and semisolid streams including sludges and skimmings from various separation units. K151 can contain up to 3 percent toluene and lesser concentrations of chlorinated aliphatics, chlorinated aromatics, and benzene.

Because of their highly organic nature, EPA has determined that thermal destruction technologies, such as incineration or fuel substitution, represent BDAT for K149 and K150. In a similar manner, since K151 wastes may contain significant concentrations of hazardous organics and since K151 wastes comprise a variety of waste matrices, EPA has determined that incineration also represents BDAT for these wastes. While extraction technologies, such as thermal desorption and critical fluid extraction, appear to be potentially applicable to some K151 wastes, EPA currently lacks data verifying their performance on wastes similar to these K151 wastes. If these technologies can achieve the levels of performance (i.e., comply with the concentrations) of the proposed treatment standards, they could also be considered to be BDAT.

While most of these wastes, as generated, would be classified as "nonwastewaters" according to definitions applicable to the land disposal restrictions (40 CFR 268.2 (d) and (f)), EPA nevertheless sets treatment standards for wastewater forms as well as nonwastewater forms of these wastes on a waste code-basis. Even though the listing of these three wastes does not specifically include wastewaters, if water or wastewater comes in contact with these wastes (such as during storage, treatment, or disposal), a wastewater form of these would be generated that would have to comply with the treatment standards (provided the waste was to be placed in a land disposal unit.)

As a result, EPA is proposing treatment standards for both wastewater and nonwastewater forms of K149, K150, and K151 wastes which are numerically equivalent to the universal standards proposed for the constituents selected for regulation in these wastes. The development of these standards is presented in the BDAT background document for these wastes located in the administrative docket for today's rule. EPA is proposing maximum concentration limits for benzene, toluene, five chlorinated aliphatics, and six chlorinated aromatics in both wastewater and nonwastewater forms of these wastes. The tables at the end of this section list, by waste form, the proposed standards for each constituent and indicate the constituents that are regulated in each waste code. The proposed nonwastewater standards are based on the limits of analytical detection of these compounds in incineration ash residues. EPA has data from the incineration of fourteen vastly different, difficult to treat hazardous wastes indicating that these standards should be achievable on a routine basis for most hazardous wastes. The proposed wastewater standards reflect the performance of industrial wastewater treatment systems as documented in several of EPA's Office of Water and Risk Reduction Engineering Laboratory databases and presented in Volume C of the Final BDAT Background Document for U and P Wastes and Multi-Source Leachate available in the Third Third rulemaking docket.

PROPOSED BDAT STANDARDS FOR K149, K150, AND K151

[Nonwastewaters]

Constituent	Maximum for any single grab sample	Constituents regulated for waste codes		
	Total composition (mg/kg)	K149	K150	K151
Benzene	10			X
Carbon tetrachloride	6.0		X	X
Chloroform	6.0	X	X	X
Chloromethane	30	X	X	
Chlorobenzene	6.0	X		
1,4-Dichlorobenzene	6.0	X	X	
Hexachlorobenzene	10	X	X	X
Pentachlorobenzene	10	X	X	X
1,2,4,5-Tetrachlorobenzene	14	X	X	X
1,1,2,2-Tetrachloroethane	6.0		X	
Tetrachloroethylene	6.0		X	X
1,2,4-Trichlorobenzene	19		X	
Toluene	10	X		X

PROPOSED BDAT STANDARDS FOR K149, K150, AND K151

[Wastewaters]

Constituent	Maximum for any single grab sample	Constituents regulated for waste codes		
	Total composition (mg/l)	K149	K150	K151
Benzene	0.14			X
Carbon tetrachloride	0.057		X	X
Chloroform	0.046	X	X	X
Chloromethane	0.19	X	X	
Chlorobenzene	0.057	X		
1,4-Dichlorobenzene	0.090	X	X	
Hexachlorobenzene	0.055	X	X	X
Pentachlorobenzene	0.055	X	X	X
1,2,4,5-Tetrachlorobenzene	0.055	X	X	X
1,1,2,2-Tetrachloroethane	0.057		X	
Tetrachloroethylene	0.056		X	X
1,2,4-Trichlorobenzene	0.055		X	
Toluene	0.080	X		X

VII. Treatment Standards for Hazardous Soils

A. Introduction

This section discusses proposed alternative treatment standards for hazardous soils that may be met instead of the treatment standards that currently apply to the contâminating hazardous wastes. These proposed alternative standards would apply to soils that contain listed hazardous wastes, and soils that exhibit any of the characteristics of hazardous waste.

In particular, EPA is proposing two alternative technology-based treatment approaches for compliance with the hazardous soil treatment standards and also soliciting comment on variations of these alternate approaches. It should be understood that the Agency is also in the process of developing a proposed rule for contaminated media (including soil) in the context of the Hazardous Waste Identification Rule. As a result of that effort, the Agency may propose additional regulatory options for LDR treatment standards for hazardous soils, or modify the options presented here in order to establish a consistent regulatory framework for hazardous soils under RCRA.

Today's proposal is important in several respects. First, it continues the process of developing tailored standards, such as the previously promulgated treatment standards tailored to multi-source leachate and to hazardous debris. Because today's proposed treatment standards are tailored to contaminated soil media, this proposal would primarily affect activities associated with cleanup and consequent waste management at contaminated facilities and sites.

Second and more important, the treatment standards proposed today are based on levels attainable by a variety of technologies, including innovative technologies. Thus, technologies that are more appropriate for the treatment of hazardous soils than combustion are identified as BDAT.

In addition, EPA is proposing to codify the contained-in policy for soils (as it did for debris in the Phase I LDR rule, see 57 FR 37194, August 18, 1992.) The regulation would establish a process for determining on a site-specific basis whether or not environmental media (e.g., soil and ground water) "contain" a hazardous waste.

B. Applicability, Regulatory Status of Treated Soils, and Definitions

1. Applicability

Under current regulations, land disposal of soils that contain a prohibited listed hazardous waste, or that exhibit a prohibited characteristic of hazardous waste, is prohibited unless such soils have been treated to meet the treatment standards promulgated for that hazardous waste (i.e., the same treatment standard the waste would have to meet if it was newly generated rather than found in the soil matrix.) Today's rule proposes alternative treatment standards that are specific to hazardous soils. This continues the process of developing treatment standards tailored to specific types of hazardous wastes associated with remediation activities. The Agency thus has promulgated treatment standards specific to multi-source leachate and for hazardous debris.

2. Regulatory Status of Treated Soils

Under this proposal, treatment of soils to meet the proposed treatment standards may or may not affect the regulatory status of the soils under RCRA subtitle C, depending on whether the soil is contaminated with listed waste or displays a hazardous characteristic, or upon a site-specific determination that the soil no longer contains hazardous waste (see section 3 below). Treatment of hazardous soils to meet the proposed treatment standards would not, of itself, determine whether the soils would remain a hazardous waste. However, treatment to meet the proposed treatment standards may, in some cases, achieve the result that the soil is no longer hazardous based on separate regulatory determinations.

It is not possible to predict at this time precisely how, or if, the Agency may exempt certain hazardous soils from subtitle C in future actions, or how those exemptions (if such exemptions are developed) might compare with the LDR treatment standards proposed here for hazardous soils. If, however, the final exemption levels were at or above the LDR treatment standards and represented minimize threat levels, treatment standards would be capped at those levels, and the wastes also would no longer be subject to any other subtitle C control.

3. "Contained-in" Determinations

The Agency's "contained-in" policy says that environmental media such as soil or ground water that is contaminated with hazardous waste must be managed as the hazardous waste until the waste is separated from the media so that it no longer "contains" the hazardous waste. EPA is proposing in this notice to codify the contained-in policy for environmental media. The codification will provide a mechanism for determining when environmental media (e.g., soil, ground water) no longer "contain" listed hazardous wastes, and thus, are no longer subject to subtitle C regulation.

As proposed today, these contained-in determinations will be made by the EPA Regional Administrator or designee on a site-specific basis, considering factors such as exposure potential and contaminant characteristics (e.g., concentrations, mobility, persistence). Management scenarios for the contaminated media (e.g., disposal in a lined landfill) would not be a factor in making contained-in determinations. However, contained-in determinations could constitute "minimize threat" levels at a particular site. Thus, for a particular site, contained-in levels could function as a cap for LDR treatment standards.

4. Definitions

EPA is proposing a definition for hazardous soil, and identifying the constituents subject to treatment for hazardous soil. Soil is unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles (sizes as classified by the U.S. Soil Conservation Service), or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil. Cf. 57 FR at 37224 (August 18, 1992) where EPA adopted a similar classification scheme for debris.

This proposed definition would allow site managers (e.g., on-scene coordinators, remedial project managers, or equivalent corrective action officials) to determine whether the material to be excavated is waste, debris, or soil by judging the results of simple in-situ mechanical removal processes to separate the materials. Such processes include pumping, dredging, or excavation by backhoe, forklifts, or other devices. Of course, any non-soil that is separated is subject to the treatment standard for that material. *Id.* In addition, any intentional mixing of soil with non-soil does not result in the mixture being classified as soil. Rather, it is a type of impermissible dilution. *Id.* and *id.* at 37243.

This approach would avoid requiring chemical analysis for soil properties in order to differentiate precisely between waste, soil and debris (e.g., considering such things as soil particle size, elemental composition of the soil, or other properties that might distinguish soil from waste or debris). Attempting to distinguish more precisely between waste, soil, or debris using a chemical analysis or other tests would be difficult to develop and support, and cumbersome to administer. In addition, a basis for chemical analysis or other tests has not been developed, and implementation of any such approach would most likely not be beneficial, but rather simply delay the progress of remedial actions. The Agency specifically solicits comment on the definition proposed for soil and this type of pragmatic approach for classifying mixtures of soil and other materials. (As noted in a following section, however, adding soil to other materials to attempt to reclassify the mixture as "hazardous soil" is a form of impermissible dilution and is illegal under the LDR program.)

a. Hazardous soil. Hazardous soil is soil that contains RCRA hazardous waste(s) listed in 40 CFR part 261, subpart D, or soil that exhibits one or more of the characteristics of a hazardous waste defined in 40 CFR part 261, subpart C. It can be generated from a wide variety of activities, including remedial actions at Superfund and RCRA corrective action sites, and spills at manufacturing plants. It should be noted that in the Advance Notice of Proposed Rulemaking (ANPRM) published on October 24, 1991 (see 56 FR 55160 at 55172), EPA suggested that soils containing listed hazardous wastes and soils that exhibit one or more of the hazardous characteristics be defined as "contaminated soil." Many commenters to the ANPRM were confused as to the scope of the definition. They felt that the definition suggested in the ANPRM included not only hazardous soils but all soils contaminated with any toxic constituents. To clarify this point, the Agency is changing the term used to refer to soils subject to regulation from "contaminated soil" to "hazardous soil."

b. Constituents subject to treatment. Under today's proposed approach, hazardous soil would be treated for each constituent subject to treatment, regardless of whether the contaminating waste is a listed or characteristic waste. The Agency is proposing to define constituents subject to treatment as any regulated constituent found on Table UTS in today's proposed § 268.48, that is present at levels above the universal constituent-specific treatment standards. The constituents in Table UTS are all of the BDAT list hazardous constituents that can be analyzed. As with multi-source leachate, hazardous

soil can contain potentially all of these constituents. See, e.g., 55 FR at 22619–620 (June 1, 1990). Of course, not every soil will contain all of these constituents, and EPA is not proposing that soils necessarily be monitored for the entire list of hazardous constituents. (See section VII.A.) However, a scheme that limited treatment only to the hazardous constituents in the listed waste or the TC constituent contaminating the soil would usually overlook the reality of the situation: Soils (like multi-source leachates) frequently are contaminated with an enormous variety of contaminants from diverse sources. A treatment scheme that ignored this reality would not fulfill the requirement of section 3004(m) of RCRA that the hazardous constituents present in prohibited wastes be treated so as to minimize threats to human health and the environment. See also *Third Third Case*, 976 F.2d at 16 (treatment must remove or destroy the hazardous constituents in prohibited wastes in order to satisfy section 3004(m), and merely removing one indicia of hazardousness is insufficient to satisfy this requirement). For soil which is hazardous because it exhibits the characteristics of ignitability, corrosivity, or reactivity, the Agency would require treatment until the soil no longer exhibits the characteristic and also requires that the numerical treatment standards be met for all constituents subject to treatment.

c. Illegal contamination of soil. As noted above, illegal contamination of soil is the deliberate addition of hazardous constituents or hazardous waste to soil (or vice versa). The Agency believes that existing regulations concerning impermissible dilution (40 CFR 268.3 (a) and (b)) already make this conduct illegal, and subject the mixture to the most stringent treatment standard for any waste in the mixture (40 CFR 268.41(b)). The Agency acknowledges, however, that the promulgation of standards for hazardous soil which are less stringent than the treatment standards that apply to hazardous waste may create an incentive to illegally mix waste with soil.

Because such action would be illegal, the Agency believes that most generators of hazardous waste will not mix prohibited hazardous waste with soil. Specifically, section 3008(a) of RCRA provides EPA the authority to issue an order assessing a civil penalty against any person who violates any requirement of subtitle C of RCRA. Criminal penalties may also apply. EPA requests comment on whether any further safeguards are needed, however, to assure that no attempts are made to dilute hazardous waste with soil.

d. Nonanalyzable constituents. Hazardous soils are often contaminated with more than one hazardous constituent, many of which have analytical methods available while others do not. For soils containing multiple organic constituents, some of which are nonanalyzable, the Agency believes that treatment of the analyzable constituents to meet the soil treatment standards should provide adequate treatment of any nonanalyzable constituents to appropriate levels. The Agency is therefore not proposing treatment standards for nonanalyzable constituents found in such hazardous soil. The Agency requests comment on this approach as well as data on the degree to which nonanalyzable constituents are treated when the soil is treated for other organic constituents. If EPA should choose, based on public comments, to regulate these constituents, it could require treatment by specific technologies known to achieve adequate treatment of the constituent. If this is determined to be necessary, EPA could publish performance standards for the specified technologies with the promulgation of this regulation.

In other cases, a hazardous soil may be contaminated solely by nonanalyzable constituents, such as nonanalyzable U or P wastes. For these soils, the Agency proposes requiring treatment by the methods specified in § 268.42 for those U or P wastes. The Agency solicits comment on whether other technologies should be allowed for treatment of such soils.

EPA points out that in proposing to exempt certain wastes from subtitle C control (see 57 FR at 21469, May 29, 1992), the Agency did not allow wastes that contained nonanalyzable constituents to qualify for the generic exemption. The Agency has not yet finally determined whether such wastes will be available for the generic exemption, and whether hazardous soils should be addressed differently than wastes.

C. Proposed Approaches for Establishing Treatment Standards for Hazardous Soils

In developing an LDR program for hazardous soil, the Agency had a primary objective: The treatment standards should be appropriate for soil. The technology-based soil standards thus should not be based exclusively on incineration. See 55 FR at 8760–61 (March 8, 1990). Innovative technologies are particularly appropriate to treat the large volumes of low and moderately contaminated soil.

To satisfy this objective, the Agency is proposing two approaches it believes are achievable (in most cases) using innovative technologies, and is soliciting comment on a variation of one of the two options. The Agency solicits comments on which of the approaches should be promulgated in the final rule. Table UTS in today's proposal (§ 268.48) lists the constituents subject to treatment and the universal treatment standards which are the basis of the soil treatment standards.

1. Technology-Based Treatment Standards for Hazardous Soils

As indicated above, the Agency is considering several approaches for developing technology-based treatment standards for hazardous soils. Under these approaches, the universal treatment standards (discussed in section III.A of this preamble) are proposed for soil as "base" standards. Each approach allows for treatment to levels above the universal standards and differ primarily in the extent of treatment required.

Under the first approach, the Agency is proposing a range of standards with a "ceiling" one order of magnitude above the universal standard, provided 90% treatment of each constituent subject to treatment is achieved. The second approach is a variation of the first, in that the Agency is proposing a range of standards with a "ceiling" one order of magnitude above the universal standard, however, there is no requirement that 90% reduction occur. The third approach proposes an unlimited range of values above the universal standard provided 90% treatment is attained (i.e., there would be no "ceiling" value) unless 90% treatment would treat the waste to a level below the universal treatment standards. If such a level would be achieved through 90% treatment, the universal treatment standards would be met.

Analysis of the available soil treatability data has revealed that innovative technologies (e.g., thermal desorption, biological treatment, dechlorination) can generally achieve the universal standards proposed today. In several cases, however, non-combustion does not achieve the universal standards. Thus, the various approaches proposed today provide an additional assurance as to the achievability of meeting the treatment standards for potentially hard-to-treat soil matrices. Additionally, the proposed approaches would encourage the use of effective innovative (i.e. non-

incineration) technologies, a reasonable objective given EPA's determination that combustion is not always appropriate as the Best Demonstrated Available Technology for many soils. 55 FR at 8761.

Furthermore, the Agency believes these approaches are appropriate for setting treatment standards for hazardous soils, given the unique and often heterogeneous characteristics of soils. The proposed approaches accommodate possible limitations of the data: That is, the data may not represent potentially problematic matrices and varying contaminant levels. The proposed universal treatment standards are expressed as total concentration levels for each organic constituent. The proposed universal treatment standards for each metal constituent is expressed as a level measured in the TCLP extract, because metal treatment technologies typically involve stabilization or immobilization, and leachability and reduced mobility of the metals is best reflected in the concentrations in the TC extract (i.e., metals are not destroyed or eliminated after treatment with stabilization or immobilization technologies, but rather have reduced mobility.) Although metals recovery technologies are available, they are not generally practical for treating hazardous soil because of the relatively low levels of metal contamination typically found in soil (i.e., low relative to the concentrations necessary for economical metal recovery).

Soils that were contaminated with both organic and metal constituents would possibly require treatment by more than one technology. Generally, the first technology would treat the organic constituents (e.g., by thermal desorption) and the second technology would treat the metals (e.g., by stabilization).

Stabilization is typically not considered an effective treatment technology for organics; in addition, organics can interfere with the stabilization process. Nevertheless, difficulties can occur at those sites where metals are the constituents of concern, and where organic compounds are also present at concentrations only slightly greater than the universal standards. In this case, the generator or treater may consider treating the soil by stabilization without additional treatment for the organic constituents present. The data currently available to the Agency do not fully address the effectiveness of stabilization technologies for treatment of very low levels of specific organic constituents. Although not considered an appropriate treatment technology for organic constituents, the Agency requests comment on the practicality of using stabilization technologies for treating soil containing low levels of organic constituents. The Agency also requests that commenters provide analytical data demonstrating the effective treatment by stabilization of soil contaminated with organic constituents, if available.

a. Range of standards with a "Ceiling" one order of magnitude above the Universal Standard, provided 90% treatment occurs. Under this approach, EPA is proposing treatment standards for hazardous soil as a range of values. The base levels would correspond to the proposed universal standards, and the "ceiling" would be one order of magnitude above the universal levels. If the generator or treater of hazardous soil achieves a treatment standard above the universal level (but no higher than one order of magnitude above the universal standard, or the "ceiling"), they must document that at least 90% treatment of the constituent has been achieved by indicating the initial constituent concentration and the final constituent concentration. Such documentation would be placed in the generator's or facilities' files. (See proposed § 268.48.)

As concentrations increase in a hazardous soil, the percent treatment necessary to achieve at least the "ceiling" levels would also increase. For example, if the untreated concentration is one order of magnitude above the ceiling, achieving the ceiling level will require a 90% reduction of the constituent. As the initial concentration increases beyond an order of magnitude above the ceiling, reductions of greater than 90% would be needed in order to achieve the ceiling level. Thus, high initial concentrations would require high treatment efficiencies. For example, an initial concentration of 5,000 mg/kg of anthracene in hazardous soil would require a treatment efficiency of 99.3% to achieve the "ceiling" level of 34 mg/kg (anthracene universal standard = 3.4 mg/kg).

It could be argued that high initial concentrations requiring high treatment efficiencies would force treaters to select incineration and other high efficiency technologies. The Agency acknowledges that this may be the case with very high untreated concentrations. However, the Agency does not consider this a problem for three reasons: (1) Data indicate that relatively high treatment efficiencies are possible using some innovative technologies; (2) most hazardous soil is not highly contaminated and is well-suited to the use of innovative technologies; and, (3) when highly contaminated hazardous soils are encountered, the use of highly efficient technologies (i.e. incineration) may be appropriate. Thus, the Agency acknowledges that a highly contaminated hazardous soil may have to be treated with a fairly aggressive technology in order to achieve the "ceiling" value.

In analyzing the data, the Agency determined that a one order of magnitude "ceiling" was appropriate given the Agency's commitment to the increased use of innovative technologies. Although 65% of all data pairs for treated organics in EPA's database were treated using innovative technologies to levels less than the proposed universal standards, the proportion of data pairs capable of achieving the standard increased to 69% when the levels were established at the order of magnitude "ceiling" provided 90% treatment. Many innovative technologies were capable of achieving the treatment levels under this approach. The EPA solicits comment on this overall approach and also on whether the "ceiling" of ten times the universal standard (or other ceiling) appropriately addresses technical and environmental concerns where hazardous soils are heavily contaminated with toxic constituents and the 90% treatment portion of the option neither optimizes technology performance nor reduces hazardous constituents to levels at which threats are minimized.

b. Range of standards with a "ceiling" one order of magnitude above the universal standard. The Agency also requests comment on a variation of this approach: The order of magnitude increase over today's proposed universal standard would be the treatment standard. Under this option, the treater would be required to treat all constituents subject to treatment to levels at or below the ceiling, (i.e., the universal standard times ten), without consideration of treatment efficiency. In other words, the treater would have to achieve the standard regardless of whether to do so for a given constituent required a 20% treatment efficiency or a 99.9% treatment efficiency.

The basis for this option would be to increase the number and type of innovative technologies capable of achieving the treatment standards. In addition, this option has the advantage of simplifying compliance with the rule: Only one number per constituent would function as the treatment standard independent of treatment efficiencies. Under this option, analysis of the data for treatment of organic hazardous constituents in soils reveals that 91% of the organic data were treated to levels

less than or equal to the universal standard times 10 by a diverse range of innovative treatment technologies. The Agency solicits comment on how much waste volume would still be incinerated if this option is promulgated as the treatment standard.

c. Achieving 90% treatment with no "ceiling". Alternatively, EPA is also proposing today an approach which would allow the treater of hazardous soil the option of meeting the land disposal restriction requirement for soil by either achieving 90% treatment of each constituent subject to treatment or by achieving treatment to the universal treatment standard (in cases where 90% treatment would result in a concentration lower than the universal treatment standard.) This approach differs from the previous approaches in that there would be no numerical treatment standards that would have to be met in situations where 90% treatment occurs; documenting 90% treatment would be sufficient to meet the LDR requirements.

The Agency is presenting this approach as an alternative to possibly encourage the development of new and innovative technologies to provide safer, more cost-effective, and more publicly accepted methods for treating remediation-related wastes. There is some question whether innovative technologies can generally meet the numerical standards proposed under the approaches discussed above because it is unclear whether the available data in the soils database fully characterize the wide range of soils and contaminants potentially encountered in the field. Remediation-related soils are highly variable in concentration, contaminant mix, and type in the field, and EPA is concerned that its existing data may not adequately represent this diversity.

In addition, there is also concern that the existing data may not be representative of the performance of innovative technologies in the field. EPA collected available data of three scales: Bench, pilot, and field. EPA considered all available data in determining the treatment standards proposed under the previous approach; however, over 50% of the treatment tests upon which EPA based the treatment standards are bench scale tests. The Agency believes that less weight may need to be given to bench scale data than full and pilot scale data because of the greater uncertainty in performance of the technology.

EPA solicits comment on the technical or environmental appropriateness of a 90% reduction approach, in particular where hazardous soils are heavily contaminated with toxic constituents and a 90% floor on treatment neither optimizes technology performance nor reduces hazardous constituents to levels at which threats are minimized. EPA also solicits comments as to whether a 90% approach should be applied to inorganic hazardous constituents.

2. Explanation of Numeric Treatment Standards for Hazardous Soils

Under today's proposal, the specific hazardous soil treatment standard for a given constituent will depend on which of the approaches is promulgated. The following examples illustrate how the proposed approaches would work.

Example 1. The hypothetical basis for this example is a waste regulated for pentachlorophenol, which is present in the untreated soil at 1200 mg/kg.

Scenario 1. Today's proposed rule would require treatment to a level one order of magnitude greater than the universal standard (7.4 mg/kg), provided a 90% reduction in the constituent concentration occurs. Under this approach, pentachlorophenol would be reduced to at least 74 mg/kg, the value one order of magnitude greater than the universal standard (totals levels). Achieving the technology-based standard of 74 mg/kg would require a treatment efficiency of 94% for treating pentachlorophenol. The standard under this scenario is affected by the untreated contaminant level. If the untreated waste was at 120 mg/kg, 90% treatment would require achieving 12 mg/kg. If the untreated level was 12 mg/kg, 90% treatment would achieve 1.2 mg/kg; however, because the universal standard is 7.4 mg/kg, treatment would be required only to the 7.4 mg/kg universal standard level.

Scenario 2. Under this scenario, the proposed rule would require treatment to a level one order of magnitude greater than the universal standard. The proposed universal treatment standard for pentachlorophenol is 7.4 mg/kg; therefore soil would need to be treated until it achieved at least 74 mg/kg. Because a percentage removal is not required under this scenario, the limit is valid for all soils regardless of the untreated level.

Scenario 3. Under this scenario, a 90% reduction in constituent concentration must be achieved. The untreated level of pentachlorophenol was 1200 mg/kg. This constituent concentration must be reduced by 90%, thus a treated level of at least 120 mg/kg (1200 mg/kg reduced 90% is 120 mg/kg) would have to be met. The standard under this scenario is also affected by the untreated contaminant level. If the untreated waste concentration is 120 mg/kg, 90% treatment would require achieving 12 mg/kg. If the untreated level was 12 mg/kg, 90% treatment would achieve 1.2 mg/kg; however, because the universal standard is 7.4 mg/kg, treatment is required only to 7.4 mg/kg.

Example 2. Soils that are hazardous because they exhibit the characteristics of ignitability, corrosivity, or reactivity, would require treatment by technologies which eliminate these characteristics. If the hazardous soil was hazardous solely because it contained a TC constituent and no other underlying hazardous constituent, the proposed hazardous soil treatment standard for that constituent would have to be achieved. If, however, these wastes contained other constituents subject to treatment, as explained above, they would have to be treated to achieve the hazardous soil treatment standards for each constituent.

3. Treatment Standards for Residues from Soil Treatment

When hazardous soil is treated, several types of residues can be generated: The treated soil, including in some cases soil fractions containing concentrated levels of contaminants, wastewater from the treatment of hazardous soil, and possibly debris. In addition, treatment units often generate air emissions. The regulatory status of these residues and emissions is discussed below.

Treated soil, and any soil-like residue, would continue to be subject to the soil treatment standards (unless, as discussed above, the soil was determined on a site-specific basis to no longer "contain" hazardous waste, and thus the level of hazardous constituents remaining in the soil were determined not to exceed minimize threat levels). In particular, when a fraction of the treated soil contains concentrated levels of contaminants, additional treatment may be necessary using a different and more appropriate treatment technology. For example, soil washing may effectively treat the sandy fraction of a hazardous soil to the soil treatment standards, but may generate a clay fraction with high concentrations of contaminants that would more appropriately be treated with a thermal desorption or immobilization technology. This (hypothetical) clay fraction would also have to be treated to meet the applicable treatment standard. Thus, EPA does not consider such residues to be a new treatability group for purposes of this rule, and consequently such a nonwastewater residue would remain subject to the soil treatment standard. Cf. 55 FR at 22661 (June 1, 1990).

Hazardous wastewater from the treatment of hazardous soil would be subject to the universal standards being proposed under 40 CFR 268.48 for all hazardous constituents subject to treatment and for any hazardous constituents added during treatment. The Agency believes the universal standards are appropriate for such wastewater, given that the standards were initially developed for multi-source leachate, a wastewater that results from contact of water with soil and disposed hazardous constituents. (Characteristic wastewater managed in

land-based wastewater treatment systems, however, would normally not be subject to treatment standards under this rule, but rather would be addressed when the Agency takes up the issues relating to centralized wastewater management remanded by the court in the *Third Third Case*.)

Any hazardous debris residuals would be subject to the treatment standards for debris that were promulgated on August 18, 1992 (57 FR 37194).

Air emissions from treatment units are controlled, in some cases, by regulatory programs under the Clean Air Act (CAA) or under RCRA. In particular, the Agency initiated a three-phased program under section 3004(n) of RCRA to address air emissions from hazardous waste management units other than thermal treatment units (e.g., incinerators, boilers, industrial furnaces). The first phase addressed organic air emissions as a class from two types of emission sources. The first source category was process equipment (e.g., pumps, valves) that contact hazardous waste that contain greater than 10 percent organic compounds, including units such as distillation columns and incinerators. The second source category was certain vents on various treatment technologies, such as air or steam strippers. These standards were promulgated as final rules and published in the **Federal Register** on June 21, 1990 (55 FR 25454). The second phase of standards developed under section 3004(n) of RCRA was proposed on July 22, 1991 (56 FR 33491) and addressed organic air emissions from containers, surface impoundments, and certain tanks. In the third phase of the section 3004(n) standards development, the Agency will develop additional standards for the sources addressed in the first two phases as necessary to address residual risks.

In addition to the RCRA section 3004(n) standards, the Agency regulates organic and metal emissions from the combustion of hazardous waste in incinerators, boilers and industrial furnaces. See subpart O, part 264 for incinerators, and subpart H, part 266 for boilers and industrial furnaces. These controls are expected to address many risks posed by air emissions during treatment of hazardous soils in these units. (A May 18, 1993 Agency statement indicated, however, that some of these standards should be amended to be made more strict in order to adequately control such pollutants as particulate matter and dioxins.)

4. Treatability Variances

When a hazardous soil cannot be treated to the specified standard, the generator or treatment facility may petition the EPA for a variance from the treatment standard. A variance mechanism exists under the LDRs for providing variances from the required treatment standards for hazardous soils. See 40 CFR 268.44.

EPA established the variance procedure to accommodate those wastes that cannot be treated to meet the standards even when appropriate well-designed and well-operated treatment systems are used. A variance is also available when a treatment technology is inappropriate for a waste. Petitioners must demonstrate that the standard cannot be met because the physical or chemical properties of the hazardous soil differ significantly from the hazardous soils EPA examined in establishing the standard or that the standard is otherwise inappropriate for the hazardous soil. (See 51 FR 40605; Nov. 7, 1986.) While treatability variances may be granted that have generic applicability, usually for hazardous soil they are granted on a site-specific basis by the Regional Administrator.

D. Contained-In Determinations

EPA is proposing today to codify the "contained-in" policy for hazardous soil and other environmental media in new § 261.3(g). EPA recently codified this principle for hazardous debris. See § 261.3(f)(2); 57 FR 37194 (August 18, 1992). Today's rule also proposes procedures for obtaining contained-in determinations for contaminated media and requests comment on decision criteria for evaluating petitions for such actions.

In current practice, the primary function of a contained-in determination has been to determine specific constituent concentrations at which the media at a specific site no longer "contained" hazardous waste, and thus would no longer be subject to the management standards for hazardous waste. Such a determination may be made prior to treatment or subsequent to treatment. In the latter case, the contained-in concentration levels for hazardous soil, if they are also minimize threat levels, would serve as a floor on the LDR hazardous soil treatment standards. Thus, such soil is no longer subject to subtitle C management standards, provided that the soil does not exhibit a hazardous waste characteristic. EPA believes that, fundamentally, it is important and necessary to be able to consider, in certain cases, site-related conditions and waste-specific characteristics in establishing soil treatment standards and subtitle C exclusion levels.

Contained-in determinations would not be self-implementing. Rather, EPA believes that site-specific determinations must be made by the appropriate regulatory agency, in careful consideration of relevant factors. This proposal therefore specifies the factors and procedures to be considered and utilized in making contained-in determinations for soil. The proposed rule would not, however, require these explicit requirements when contained-in determinations are made in the context of RCRA closures and remedy selections under RCRA and CERCLA. Such activities are typically conducted with considerable Agency oversight, and cleanup decisions are made in consideration of substantial amounts of site specific technical data. Such remedy selection decisions are generally subject to public notice and comment, through Records of Decision (under CERCLA) or permit modifications, or analogous administrative mechanisms under RCRA. Thus, these processes will provide a surrogate for the petition review process that EPA is proposing today for contained-in determinations that are pursued outside the context of RCRA or CERCLA remedial actions.

In making contained-in determinations, we believe that EPA (or the authorized State) must consider all possible exposure pathways which could pose a threat to human health or the environment. Exposure pathways to be considered thus include direct human contact through ingestion, exposure to ecosystems, and potential for leaching of constituents to ground water.

Given the extreme variations in site-specific and constituent-specific characteristics, EPA is not proposing to adopt specific formulae or other quantitative means of calculating appropriate contained-in levels. The Agency believes that considerable flexibility must be allowed for such decisions, if the process is to be workable.

Proposed § 260.42 provides a set of decision factors that may be considered by the Regional Administrator (or State Director) in making contained-in determinations. In particular:

- Media characteristics;
- Waste constituent characteristics, including solubility, mobility, toxicity, and interactive effects of constituents present that may affect these properties;
- Exposure potential, including potential for direct human contact, and

potential for exposure of sensitive environmental receptors;

- An "acceptable" risk range of 10^{-4} to 10^{-6}
- Surface and subsurface characteristics, including depth to ground water, and characteristics of subsurface formations;
- Climatic conditions; and
- Other site or waste-specific characteristics or conditions that may affect whether residual constituent concentrations will pose a hazard to human health or the environment.

The Agency specifically requests comment regarding these contained-in decision criteria. In particular: (1) Should the final rule specify a list of criteria that must be considered; (2) should the criteria listed above be more specific regarding the conditions which would allow for or preclude contained-in determinations; and (3) are there other factors the Agency should consider when making contained-in determinations, in addition to those listed above?

The procedure for contained-in determinations, as specified in proposed § 260.42, would involve submission of a petition to the EPA Regional Administrator or State Director that requests approval of specific contained-in concentration levels, and which provides adequate supporting information addressing the factors specified in this section to enable an informed decision to be made. Opportunity for public comment would generally be provided for contained-in determinations by means of notice in a local newspaper. There would be a minimum 30-day period for submission of comments from the public. The Regional Administrator (or State Director) would assess any written comments received, and a notice in the local newspaper would be published announcing the final determination. Separate written notice would be sent to the petitioner. Such determinations would constitute final Agency action, and would not be subject to administrative appeal procedures. The Agency also proposes to waive from the procedural requirements of the contained-in determination those already subject to public notice under RCRA or CERCLA authority (See proposed § 260.42(c)).

We noted above that the Agency recently codified the contained-in principle for hazardous debris. See § 261.3(f)(2); 57 FR 37194 (August 18, 1992). The Agency did not, however, establish procedures at that time for making the determinations. Given that the procedures discussed above for hazardous soil are also appropriate for hazardous debris, we are today proposing to apply these procedures to both hazardous debris and hazardous soil and other environmental media.

EPA also notes that contained-in levels could represent site-specific levels at which threats to human health and the environment posed by hazardous constituents in the waste have been minimized. See 57 FR at 985–86 (Jan. 9, 1992) where EPA made a similar statement in the context of contaminated debris. In such a case, treatment standards would be capped at that level. *Id.* Although the contained-in and minimize threat determinations need not be identical (cf. *Hazardous Waste Treatment Council* v. *EPA*, 886 F. 2d at 362–63, explaining that the minimize threat level is a stricter standard (for example) than the levels at which wastes are identified or listed as hazardous), and indeed is generally regarded as among the strictest of the statutory environmental standards (*id.* and *Third Third Case*, 976 F. 2d at 14), there is no absolute bar to a determination that sufficient concentrations of hazardous constituents have been destroyed, removed, or immobilized to determine both that the soil no longer "contains" hazardous wastes and that threats to human health and the environment posed by the hazardous constituents in the wastes have been minimized. EPA stresses that in making such a determination, threats to both human health and the environment would have to be considered (see section 3004(m) and 886 F.2d at 362). In addition, any such determination would have to be based exclusively on remaining threats posed by the waste without regard to how the waste will be managed (see *American Petroleum Institute* v. *EPA*, 906 F. 2d 729, 735–36 (D.C. Cir. 1990) explaining that section 3004(m) standard ordinarily can be satisfied only by treatment occurring before subsequent disposal of the waste).

EPA solicits comment on its proposed approach for contained-in determinations, particularly on the decision factors to be used, the procedures for making determinations, and the proposed linkage to treatment standards and subtitle C exclusion levels.

E. Soil Treatment Database

1. Treatment Technologies

EPA believes that nine general technologies have been demonstrated and are available for treating hazardous soil: (1) Biological treatment; (2) chemical extraction; (3) dechlorination; (4) high-temperature metals recovery; (5) solidification/stabilization/immobilization; (6) thermal desorption; (7) thermal destruction; (8) vitrification, and, (9) soil washing. A brief description of each technology is presented in Appendix A following this preamble.

2. Development of the Database

The Agency has collected data on the treatment of hazardous soil from CERCLA remedial actions, demonstrations under the Superfund Innovative Technology Evaluation (SITE) program, industrial sources, and EPA-sponsored treatment tests. The Agency attempted to obtain all available soil treatment data which met minimum requirements of quality assurance and quality control. Each treatment test contains information on the treatment process used and results of laboratory analyses on untreated and treated soil. A hazardous soil database was developed to organize and analyze this treatment data. The database will be available as a national resource to EPA regions, states, PRPs and other government agencies to support LDR applications and compliance, technology screening for selection of remedial actions, and variance petition screening and support.

To develop the soil treatability database, the Agency prepared Data Summary Forms (DSFs) to record information from the treatment test reports. The DSFs contain information on site identification, soil matrix, soil collection description, treatment system, design and operating conditions of the treatment system, concentrations of hazardous constituents in untreated and treated soil, QA/QC information, and residual matrix information.

After all the data were edited (the next section of this preamble explains the criteria used to edit the data), 36 treatment technologies were represented by 2541 data pairs, for a total of 295 treatment tests: 43 (15%) of the tests were full scale, 108 (36%) were pilot scale, and 144 (49%) were bench scale. Table 1 lists the number of DSFs having information for each technology as well as the scale of the test.

TABLE 1—NUMBER OF BENCH, PILOT AND FULL SCALE TREATMENT TESTS BY TECHNOLOGY

Treatment Technology	Scale of test		
	Bench	Pilot	Full
BT01*—Aerobic Bioremediation	2	1	0
BT03*—Aerobic/Anaerobic Bioremediation	0	1	0

TABLE 1—NUMBER OF BENCH, PILOT AND FULL SCALE TREATMENT TESTS BY TECHNOLOGY—Continued

Treatment Technology	Scale of test		
	Bench	Pilot	Full
BT04*—Composting	4	1	0
BT05*—Aerobic Bioslurry	7	2	1
BT07*—In-situ Bioremediation/ Unlined	0	0	1
BT08*—Aerobic Composting/ Lined	3	5	0
BT12*—Aerobic Land Treatment/Lined	2	0	2
CE00*—Chemical Extration	0	3	0
CE01*—Solvent Extraction	9	6	0
CE03*—Critical Fluid Extraction	0	2	0
CT01*—Hydrolysis	1	0	0
DC01*—KPEG Dechlorination	5	1	1
DC02*—APEG Dechlorination	4	0	1
DC03*—High Temperature Dechlorination	0	1	0
IM00—Immobilization	3	2	1
IM01—Stabilization	10	16	8
IM03—Cement Stabilization	39	3	2
IM04—Fly Ash Stabilization	3	0	0
IM04/IM05—Fly Ash/Lime Stabilization	1	0	0
IM06—Kiln Dust Stabilization	5	0	0
ST01*—Air Stripping	0	1	1
ST02*—Steam Stripping	0	0	1
ST03*—Vacuum Extraction	0	0	5
SW01*—Soil Washing	5	0	0
SW02*—Acid Washing	0	1	0
SW03*—Water Washing	4	1	1
TD00—Thermal Destruction	1	0	0
TD01—Rotary Kiln	1	13	9
TD04—Infrared	0	8	0
TD06—Pyrolysis	0	2	0
TD07—Circulating Bed Combustion	0	1	0
TD08—Vitrification	0	1	0
TH01*—Low Temperature Thermal Desorption	9	28	7
TH02*—High Temperature Thermal Desorption	6	3	1
TH03*—Photolysis	1	5	0
TH07*—Thermal Distillation	1	0	1
Totals:	144	108	43
(Percent)	(49)	(36)	(15)

* These technologies are considered by the Agency to be innovative technologies.

3. Analysis of the Database

In analyzing the soil treatability database, the Agency needed to determine the adequacy of the data for setting treatment standards for hazardous soil. Therefore, the Agency reviewed the design and operating conditions for each treatment test included in the database to determine if any data should be eliminated, i.e., the Agency believed that poorly designed and operated treatment tests should be eliminated from the data set used to determine treatment standards. To evaluate the data, the Agency developed a set of minimally acceptable design and operating conditions for each technology. These criteria, or performance standards, can be found in the Hazardous Soil Rule Background Document which is in the RCRA docket for this proposed rule. A list of the data eliminated from consideration along with the rationale for each decision can be found in the docket. A total of 1183 data pairs were removed from the soil treatment standard data set as a result of this review.

The Agency then further reviewed the data set using the following criteria: (1) Immobilization data for organic constituents were not used; (2) metal constituents data from immobilization, high temperature metals recovery, soil washing, acid washing, water washing, or detergent washing were used while metals data from all other technologies deemed as inappropriate for metals were removed, (3) dechlorination data were used only for appropriate organic constituents; (4) data pairs with nondetect untreated concentrations were not used; (5) data pairs where the treated concentration for metals was given as total concentration were not used (and initial concentration was a leachate); (6) treated levels were not used where the QA/QC indicated that the percent recovery values for spikes were less than 20% or greater than 200%, and, (7) data pairs with untreated concentrations less than the proposed universal standard were not used. A total of 2541 data pairs remained after application of these criteria.

a. *Consideration of innovative technologies.* As indicated earlier, the Agency believes it important (and reasonable) to allow the use of innovative technologies, as well as incineration, in setting treatment standards for soils. Our basis for this is severalfold: First, the data suggest that innovative technologies can achieve treatment levels within a reasonable range of the levels obtained by incineration. Second, the Agency believes that it is not generally practicable to treat the large volumes of hazardous soil by incineration, particularly given the relatively low concentrations of hazardous constituents typically present. A common sense approach would indicate that incineration may be practical only for "hot-spots" where soil is highly contaminated with organic constituents (see 55 FR 8760–61, March 8, 1990). For the large volumes of soil that are contaminated with low or moderate levels of toxic constituents, innovative technologies are practical, available, and can achieve the proposed levels of the technology-based standards. Third, several innovative technologies (e.g., high temperature metals recovery, chemical extraction) are recovery technologies; we note that RCRA voices a strong preference for use of such technologies. (See, e.g., H.R. Rep. No. 198, 98th Cong. 1st Sess. 31.) And, fourth, the Agency is committed to allowing and encouraging the use of innovative technologies, particularly biological technologies, for the treatment of hazardous waste.

b. *Rationale for not using the "traditional" BDAT approach to develop hazardous soil treatment standards.* In analyzing the data, the Agency determined that the "traditional" statistical method previously used by the LDR program was not appropriate for hazardous soil. In the past, the Agency has typically evaluated incineration treatability data to identify the "most difficult to treat" waste and established the treatment standard based on a statistical analysis of data from the treatment of that waste. We believe this approach is not appropriate for hazardous soil. As indicated above, the Agency prefers to establish soil treatment standards at levels achievable by a variety of technologies, including innovative technologies. Given the large volumes of

hazardous soil, wide variations in contamination, and varying soil types, the Agency believes that flexibility in choice of technology is appropriate. For example, an aggressive highly efficient technology would not be needed to treat a lightly contaminated soil.

c. *Graphical analysis of data.* The Agency used a graphical representation of the data for each of the 80 constituents for which there was adequate data. The Agency then developed a data set for each constituent with the screened data. The data in each data set were plotted using one variable, treated concentration. The Y-axis represented the treated concentration in parts per million and the X-axis arrayed the data from lowest to highest concentration. The data were plotted using symbols to distinguish the various treatment technologies for which data was available and to denote whether the value was a "detect" or a "nondetect" value. The existing LDR treatment standards for the constituent and the proposed universal standard were also represented on the plots as benchmarks. These graphs are available in the docket.

The graphical plots for each of the 80 constituents facilitated a comparison of the treatment levels achievable by the various technologies, the existing waste code treatment standards, and the proposed universal standards. To identify a potential soil treatment level, we identified the point on the graph that was the last point in the lowest "plateau" (i.e. where the slope of the curve is close to zero) and below which were included data representing one or more well designed and operated innovative technologies obtaining efficient removal of constituents (i.e., high percent removal). This point was called the potential BDAT level. Because the proposed universal standards were within a reasonable range of this potential BDAT level, and in order to simplify and streamline the LDR program, the universal standards were selected as base treatment levels. (We note that the proposed universal standards were within a reasonable range of, and generally higher than, the treatment level suggested by the plateau on the graph.)

To determine that the treatment data from the innovative technologies were, in fact, representative of well-operated, efficient treatment units, we analyzed all data points considering factors including: untreated concentration, percent treatment, and design and operating conditions of the technology.

Essentially, this analysis was used to answer two questions: (1.) Can the proposed universal standards be met for hazardous soil utilizing innovative technologies? and; (2.) Are there any constituents for which the universal treatment levels would not be achievable? The analysis concluded that for almost all constituents, the proposed universal standards can be met using well-designed and well-operated innovative technologies. For several constituents for which only incineration data were available, this conclusion could not be reached. However, incineration was shown to be effective in treating these constituents.

d. Transfer of proposed universal standards to constituents without data. The soil data base includes data for 94 of the 191 constituents subject to today's proposed soil treatment standards. Because the available data largely justify the use of the universal standards for soil treatment, (i.e., innovative technologies appear capable of treating soil to the universal levels proposed today), the universal standards were transferred to constituents for which the database does not contain data. This transfer is justified because for all organic constituents for which innovative technology data were available, the data supported the use of the universal standards. In addition, allowing the 90% reduction in hazardous constituents alternative, with or without the one order of magnitude "ceiling," provides assurance that the proposed levels would be routinely achievable. Treatability variances remain an option for particular soils which prove more difficult to treat.

4. Request for Additional Data and Comment

EPA continues to solicit treatability data and other information relevant to the hazardous soil treatment standards proposed today. Commenters submitting performance data for treatment or recovery technologies in response to today's proposed rule are requested to include, to the extent possible, the following: Complete chemical and physical analysis of the hazardous soil, treated soils, treatment residuals, and any other materials separated from the hazardous soil; technical descriptions of the treatment or recovery process, including design and operating parameters; and information on the quality control/quality assurance (QA/QC) procedures utilized for sampling, analyzing, and operating the technology.

EPA developed "Quality Assurance Project Plan (QAPP) for Characterization Sampling and Treatment Tests Conducted for the Hazardous Soil and Debris (CS&D) Program" that describes the data quality objectives of the hazardous soil and debris program and provides the following: Detailed protocols for field sampling and measurement; a list of hazardous soil and debris constituents; procedures for sample custody and transportation; and additional QA/QC procedures for sampling and analysis. This document is available in the docket. Those intending to submit additional data to EPA are urged to consult the QAPP and communicate with EPA to confirm that the data meets EPA's QA/QC objectives.

EPA prefers pilot and full scale data over bench scale data. The Agency considered treatment test scale to be associated closely with the quantity of material used in the individual treatment tests that provided treatment data. When entering data into EPA's database, scale was entered as indicated by the data and accompanying documents. When the data reference did not provide scale information, the scale was assigned by EPA according to the quantity of soil treated. Generally, if less than 1 kg was treated, the test was categorized as bench-scale. If more than 1 kg, but less than 1,000 kg was treated, the test was categorized as pilot-scale. Cases where treatment involved more than 1,000 kg, the tests were categorized as full-scale. EPA requests comments on these quantity specific categories.

Alternative methods for defining the scale of the treatment test will also be considered. One proposal considers the intent of the test. For example, bench-scale tests are designed to determine whether alternative technologies can achieve established performance criteria. Whereas the intent of a pilot-scale study is to provide detailed cost, design, and performance data. Thus, data collected from a pilot-scale study should yield accurate scale-up information. Full-scale operations are designed to achieve remediation of the site and are not considered studies. The Agency requests comment on this alternate definition of scale, and on other potential definitions or applications of treatment test scale.

In addition, EPA continues to solicit information on the costs associated with treatment or recovery technologies for hazardous soil in order to prepare a revised regulatory impact analysis. Of interest are technical reports that include costs or estimates of costs for set-up and operation of the treatment technology. These reports should include the appropriate information on treatment efficiencies and applicability to various soil types, including all the technical information discussed in the preceding paragraphs.

F. Sampling and Analysis Protocols—Grab vs. Composite Samples

Where performance data were based on the analysis of composite and grab samples, the Agency established treatment standards based on the analysis of grab samples. Grab samples normally reflect maximum process variability, and thus would reasonably characterize the range of treatment system performance. Basing treatment standards on grab samples (and enforcing on that basis) is, of course, permissible. *Third Third Case*, 976 F.2d at 34.

In cases where only composite data exist, the Agency considers the QA/QC of the data, the inherent efficiency of the process design, and the level of performance achieved. The Agency may then choose to use this composite data to develop treatment standards. Where these data were used to establish treatment standards, the treatment standards were identified as based on analysis of composite samples. Enforcement of that standard thus would also be based on composite samples.

G. Relationship to Other Regulations and Programs

1. RCRA Land Disposal Restrictions Program

a. Existing LDR treatment standards. The Agency has promulgated land disposal restriction treatment standards for all hazardous waste that were listed or identified in part 261 before the enactment of HSWA. Soil contaminated with a hazardous waste that is subject to a treatment standard is also subject to that treatment standard. There is a question as to whether treatment standards applicable to "as generated" hazardous waste are also appropriate for hazardous soil. The Agency is also concerned that treatment technologies considered BDAT for the actual waste may not be able to achieve the waste treatment standards in soil. The Agency believes that soil may be more difficult to treat than waste because of factors such as: (1) Contamination from multiple wastes results in complex treatment and analysis matrices; and, (2) varying soil types, such as easy-to-treat sandy soil, difficult-to-treat clays, and soils with high content of organic matter. To address these concerns, the Agency developed the soil treatment database to establish treatment standards that would be appropriate for hazardous soil. Thus, when today's proposed soil treatment standards are promulgated, hazardous soil will become subject to those standards in lieu of the treatment standards for the RCRA wastes contaminating the soil.

b. Soil contaminated with newly listed wastes which have final treatment standards. EPA recently promulgated treatment standards for "newly-listed" (i.e., listed since enactment of HSWA in 1984) hazardous wastes in the Phase I final rule (August 18, 1992) including: F037–F038, K107–K110, K111, K112, K117, K118, K123, K124, K125, K126, K131, K132, K136, U328, U353, and U359. The Agency chose not to apply the treatment standards for these wastes to hazardous soil contaminated with these wastes. Consequently, we are proposing today to subject soil contaminated with these newly listed wastes to the soil treatment standards.

c. Soil contaminated with newly listed and identified wastes which have proposed treatment standards. In a separate section of this proposed rule, the Agency is proposing treatment standards for additional newly listed and identified hazardous wastes, including those that exhibit the toxicity characteristic for organics. The proposed hazardous soil treatment standards, when final, would apply to soils contaminated with those newly listed or identified hazardous wastes.

2. RCRA Corrective Action

Treatment standards proposed in this rule would, when finalized, apply to all RCRA hazardous soil (i.e., soil contaminated with a listed waste or exhibiting a hazardous characteristic.) For example, soil treatment standards promulgated under this rule would apply to corrective action at RCRA-permitted facilities or interim status facilities, when remediation of hazardous soil involves excavation and land disposal or placement of such soil. However, the Corrective Action Management Units and Temporary Units Final Rule (58 FR 8656) creates a remediation unit, called a corrective action management unit (CAMU), within which management of remediation wastes would not constitute land disposal or placement. (See 58 FR 8659). Remediation waste includes soils containing listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under § 264.101 and RCRA section 3008(h). (See 58 FR 8683). Therefore, management of remediation wastes within a CAMU designated according to the criteria in § 264.552 would not require the application of LDRs, including today's soil treatment standards.

3. Voluntary RCRA Cleanups

The proposed hazardous soil treatment standards, when final, would apply to all RCRA hazardous waste land disposed. Therefore, hazardous soil generated during the course of a voluntary cleanup would be subject to the hazardous soil treatment standards.

The Agency is concerned that the existing treatment standards that apply to hazardous waste (and soil containing hazardous waste) may pose a disincentive to voluntary cleanups. The soil treatment standards proposed today should begin to alleviate the impediments to voluntary cleanups. In general, the treatment standards proposed in today's rule regarding hazardous soil are higher than the existing treatment standards, and are intended to allow flexibility in determining what treatment technologies to utilize. EPA requests comment regarding the proposed soil treatment standard options and the effect the approaches, if promulgated, may have on voluntary cleanups.

4. Phase I LDR Rule: Hazardous Debris

On August 18, 1992, the Agency published the Phase I LDR rule; among other things, this rule set technology-based treatment standards for hazardous waste-contaminated debris. In summary, to meet the land disposal restrictions, hazardous waste-contaminated debris must be treated to the existing standards, or alternatively by specified technologies (i.e. treatment methods) based on the type of debris and the type of contaminants present. If this treatment is performed with a specified destruction or extraction technology, the treated debris would no longer be considered contaminated nor is it a hazardous waste (provided it also does not exhibit a hazardous characteristic), and thus is no longer subject to RCRA subtitle C regulation. For a further discussion, refer to the final rule (57 FR 37194, August 18, 1992).

Debris is defined as a solid material (man-made objects or environmental media) intended for disposal that: (1) Has been originally manufactured or processed, except for solids that are listed wastes or can be identified as being residues from treatment of wastes and/or wastewaters, or air pollution control devices; or (2) is plant or animal matter; or (3) is natural geologic material exceeding a 60 mm sieve size including gravel, cobbles, and boulders (sizes as classified by the U.S. Soil Conservation Service), or is primarily debris mixed with soil, liquid, sludge, or other solid waste materials. The "primarily" determination is based on the volume of

soil and debris in the loader bucket as excavated. Separation is not required. However, the generator may use screening (or other separation techniques) to separate the soil from 60 mm and larger gravel and man-made objects.

It is clear from the definition of debris that there will be an overlap with the proposed hazardous soil requirements. The Agency is following the precedent set in the hazardous debris rule: In the event of mixtures of soil and debris that are not readily separable, the Agency has decided that the primary category of a mixture (i.e., soil or debris) based on visual inspection will determine how that mixture will be regulated.

5. CERCLA as amended by SARA

This section discusses the relationship between the proposed treatment standards for hazardous soil and the Agency's response actions implemented under CERCLA (Superfund). We discuss here the current applicability of the LDR program to the Superfund program as well as the impact of today's proposed soil LDR treatment standards on the Superfund program. In this section, we discuss the difference between applicable LDR requirements and the Superfund program's use of "relevant and appropriate" requirements of other environmental laws to remediate hazardous soil.

The Superfund program's efforts to remediate hazardous soil fall into three categories: (1) Where LDR requirements are applicable; (2) where LDR requirements are found to be relevant and appropriate under the circumstances of the release; and (3) where LDR requirements are neither applicable nor relevant and appropriate. When hazardous soil is excavated, treated in another unit, and replaced on the land, or excavated and disposed in a unit outside of the area of contamination (AOC), the LDR regulations are either applicable requirements or they may be found to be relevant and appropriate requirements under the circumstances of the release. When hazardous soil is not excavated and placed into another unit as part of a Superfund response action (e.g., consolidation within the AOC, in-situ treatment, or no treatment), the LDR treatment standards do not apply because there has been no "land disposal" of a hazardous waste (RCRA Section 3004(k), 55 FR 8759–60 (March 8, 1990).) Today's proposal would not change this.

If the hazardous soil is contaminated with a listed hazardous waste or if it fails a RCRA characteristic test, the LDR regulations are applicable to the hazardous soil (see, e.g. RCRA section 3004 (d)(3),(e)(3); also see Superfund LDR Guide #5, Directive 9347.3–06FS, July 1989.) In cases where there is no known evidence that the soil is contaminated with a prohibited listed hazardous waste and thus the LDRs are not legally applicable, but the soil is contaminated with substances known to be constituents of a particular listed waste, EPA evaluates the soil to determine whether the LDR treatment standards are relevant and appropriate. See NCP, 40 CFR 300.400 (g)(2); Superfund LDR Guide #7, Directive 9347.3–08FS, December 1989.

In determining the potential relevance and appropriateness of the LDR treatment standards in a particular response action under the Superfund program, EPA makes the following comparisons, among others, where pertinent: (1) The actions or activities regulated by the requirement as compared to the remedial action contemplated; (2) the purpose of the requirement and the purpose of the CERCLA action; (3) the substances regulated by the requirement and the substances found at the CERCLA site; and (4) the medium regulated or affected by the requirement and the medium contaminated or affected at the CERCLA site (NCP, 40 CFR 300.400 (g)(2).

Currently, as set out in the preamble to the NCP, there is an established presumption that the existing BDAT treatment standards are inappropriate for hazardous soil and debris, 55 FR 8759.62, and thus under RCRA regulations at 40 CFR 268.44(h), a treatability variance is generally appropriate (unless the presumption is rebutted). Accordingly, much of the hazardous soil from CERCLA actions now excavated and disposed of is treated to meet site specific treatability variance standards. (EPA has prepared guidance documents as an aid to implementation of treatability variances.) See Superfund LDR Guide #6a, Directive 9347.3–06FS, September 1990, or Superfund LDR Guide #6b, Directive 9347.3–07FS, December 1989. Given that today's proposed treatment standards for hazardous soil are based on actual soil treatability data from technologies other than incineration, including a number of innovative technologies, the Agency anticipates that there will be less need to invoke the variance process when soil treatment standards become effective. We note, however, that today's proposed soil treatment standards would retain the treatability variance procedures of 40 CFR 268.44.

6. Soil Contaminated by Underground Storage Tanks

Petroleum contaminated soil removed during remediation of releases from a RCRA Subtitle I underground storage tank (UST) generally are not subject to the LDR soil treatment standards. These soils would generally only be defined as hazardous because of the toxicity characteristic (TC). Such petroleum contaminated soil that fails the TC for one or more of the newly identified organic wastes (D018–D043) has been temporarily deferred from regulation as a hazardous waste (55 FR 26986). In addition, the Agency has recently proposed to permanently exempt UST petroleum-contaminated soils from the TC rule (58 FR 8504). However, should a Subtitle I petroleum contaminated soil fail the TC using the superseded Extraction Procedure (EP) for toxicity characteristics D001 through D017 (the original EP toxicity characteristics), ignitability (D001), corrosivity (D002), and reactivity (D003), the soil would not be subject to the deferral and would be subject to all applicable RCRA land disposal restriction requirements.

It is notable that there is a pending lawsuit challenging this deferral. Pending the results of the litigation, these TC soils may become subject to today's proposed soil treatment standards when finalized.

Finally, the Agency reminds the regulated community that any soil contaminated by a release from a hazardous substance UST (Subtitle I) as well as from all non-Subtitle I USTs (including petroleum tanks) will continue to be subject to applicable RCRA hazardous waste requirements, including the existing land disposal restrictions and the hazardous soil treatment standards, when promulgated.

7. Other Petroleum Contaminated Soil

In response to petitions from several states, the Agency has recently proposed to temporarily suspend from regulation as hazardous waste petroleum contaminated soils from sources other than Subtitle I USTs, such as above-ground tanks and pipelines. Such a deferral has only been proposed, however; until it is finalized, these soils would continue to be subject to the applicable RCRA hazardous waste regulations, including the existing and future land disposal restrictions. See 57 FR 61542.

8. Radioactive Mixed Wastes

a. Definition of mixed wastes. Radioactive mixed wastes are those wastes that satisfy the definition of radioactive waste subject to the Atomic

Energy Act (AEA) that also contain a waste that is either listed as a hazardous waste in subpart D of 40 CFR part 261, or that exhibits any of the hazardous waste characteristics identified in subpart C of 40 CFR part 261. On July 3, 1986 (51 FR 4504), EPA determined that the hazardous portions of mixed wastes are subject to the RCRA regulations.

The majority of mixed wastes can be divided into three categories based on the radioactive component of the waste: (1) Low-level wastes, (2) transuranic (TRU) wastes, and (3) high-level wastes. Low-level wastes include radioactive waste that are not classified as spent fuel from commercial nuclear power plants, or that is not defense high-level radioactive waste from weapons production. TRU wastes are those waste containing elements with atomic numbers greater than 92, the atomic number of uranium. High-level radioactive wastes are defined as spent fuel from commercial nuclear power plants, and wastes from weapons production.

b. RCRA requirements. In the final rule for the Third Third wastes, EPA promulgated treatment standards for four treatability groups of mixed waste: (1) Specific high-level wastes, (2) D008 radioactive lead solids, (3) mixed waste containing elemental mercury, and (4) mercury containing hydraulic fluid contaminated with radioactive materials. The Agency further asserted that "all promulgated treatment standards for RCRA listed and characteristic wastes apply to the RCRA hazardous portion of mixed radioactive (high-level, TRU and low-level) wastes unless EPA has specifically established a treatability group for that specific category of mixed waste."

The Agency is today proposing to subject mixed radioactive hazardous soil to the proposed treatment standards for hazardous soil (in addition to any regulation of that material under AEA), rather than to the treatment standards for the contaminating waste. This includes soil contaminated with mixed waste for which special treatability groups have been established. Therefore, this soil would be subject to the proposed soil standards rather than to the specified treatability group standards. The Agency solicits comments on this approach.

9. Special Provisions for Soil Containing Asbestos

Asbestos is a naturally occurring family of fibrous mineral substances. The typical size range of asbestos fibers is 0.1 to 10 micrometers in length, which is not generally visible to the human eye. When disturbed, asbestos fibers may become suspended in the air for many hours, thus increasing the extent of asbestos exposure for individuals within the area. EPA and the Occupational Safety and Health Administration (OSHA) have major responsibility for the regulatory control of exposure to asbestos. EPA controls emissions of asbestos to the ambient air under section 112 of the Clean Air Act, through the National Emission Standards for Hazardous Air Pollutants (NESHAPS) program.

The Agency believes that special provisions might be needed for regulation of hazardous soil that contains asbestos. The Agency specifically requests comment on the need for such provisions, and on what special provisions might be needed. One option the Agency is considering for disposal of hazardous soil containing asbestos is to collect and seal asbestos containing soil in leak-tight containers (as described in the NESHAP requirements), followed by macroencapsulation and disposal in a Subtitle C landfill. This option would be in lieu of treating the soil by destroying or removing the contaminants subject to treatment.

H. Related EPA Activities on Contaminated Media

1. Contaminated Media Cluster

The Agency has undertaken an initiative designed to improve the overall quality of its regulatory decision-making by looking at groups or "clusters" of regulations in order to develop more integrated approaches to various environmental problems. One of these "clusters" is contaminated media, which includes hazardous soil. The goal of the Contaminated Media Cluster project is to develop a set of overarching principles to guide the Agency's approach to policies and regulations dealing with remediation.

The Agency has gathered preliminary information on the quantities and types of media needing remediation, the types of risks they represent, the current statutory and regulatory framework, the elements of an effective cleanup process, and the costs and benefits of cleanup. As part of this effort, the Agency sponsored a forum in January 1992 with participants from industry, trade associations, and congressional staff, as well as a series of meetings for regional and state participants. The purpose of the forum and meetings was to discuss the issues involved in remediating contaminated media. This LDR proposed rule is consistent with the efforts of the Contaminated Media Cluster project. The LDR program will continue to consider the goals and principles of the Cluster as they are further developed.

2. Weathered Sludges

EPA believes that weathered sludges may constitute a new category of contaminated media, or at least a different treatability group. EPA currently is attempting to assess the definition of weathered sludges, the comparison of these sludges to newly generated sludges, methods available to treat these sludges, and the relationship of these sludges to sediments. EPA is requesting data or comments on any of the above areas to consider in developing a research program which may lead to an amendment of the LDR treatment standards that are currently applicable to weathered sludges.

3. EPA Lead Strategy

In the case of hazardous soil contaminated with lead, EPA seeks to integrate the present rulemaking effort with the Agency's Lead Strategy, which was issued on February 21, 1991. This strategy presents a coordinated approach addressing the significant health and environmental problems resulting from lead pollution. Lead is a multimedia pollutant with significant toxic concerns; accordingly, EPA plans to address lead contamination by coordinating its authorities across programs. EPA solicits comments on the option of setting a total lead standard (versus the proposed leachate standard), consistent with the goal of the lead strategy. Copies of the Lead Strategy can be obtained by calling the TSCA Hotline at 1–800–835–6700.

4. Bioremediation

As a follow-up to the Administrator's Bioremediation Summit held in February, 1990, EPA explicitly is soliciting treatment data on biological technologies to aid in the development of treatment standards for hazardous soil. EPA is aware of the impact of all LDR rulemakings on the development and application of innovative treatment technologies. This notice affirms EPA's interest in gathering private sector data for consideration in setting treatment standards.

VIII. Compliance Monitoring and Notification

A. Compliance Monitoring

In the May 24, 1993 interim final rule (58 FR 29872), the Agency adopted the same approach for monitoring underlying hazardous constituents that it had used previously (in the Third Third rule at 55 FR 22620, 22621) for

multi-source leachate (F039.) That approach allowed generators and facilities that manage ignitable or corrosive wastes to monitor for underlying hazardous constituents "reasonably expected to be present." Generators could base this determination on their knowledge of the raw materials they use, the process they operate, and the potential reaction products of the process, or upon the results of a one-time analysis for the entire list of constituents subject to treatment. Treaters and disposers must perform some testing to demonstrate compliance with the standards. 58 FR 29874–875.

In adopting these requirements, the Agency noted that they might be modified in the future, and that there are certain potential deficiencies in the process, in particular, the lack of a federal requirement to notify the subtitle D treatment (if any are actually treating decharacterized prohibited wastes) and disposal facilities (see further discussion at preamble section B.3 below, and in the interim final rule (58 FR 29874, May 24, 1990)). The Agency is further concerned that generators may not be able to adequately determine the underlying hazardous constituents present in characteristic wastes, or to determine, without testing, whether these constituents are present at levels below the treatment standards. (In the case of listed wastes, which are relatively uniform as to waste composition, EPA has identified all the potential hazardous constituents that could be in the waste and specified those that must be treated. EPA is unable to make such a general finding for characteristic wastes, because they vary to a great degree. Hence, the use of generator knowledge or sampling and analysis is necessary for determining the presence and levels of underlying hazardous constituents in characteristic wastes, although the Agency may be able to develop such information as guidance for specific types of characteristic wastes.)

The Agency solicits comment on whether generators should be required to do some testing of characteristic wastes to determine what hazardous constituents are present and whether they meet treatment standards. Alternatively, the Agency could require generators to certify what underlying hazardous constituents are in the waste and whether they meet treatment standards, in a manner similar to the existing certification requirement for generators of wastes that meet the treatment standards as generated (see 40 CFR 268.7(a)(2)(ii)). While a testing requirement would ensure that there is data for each waste, it could pose an unnecessary burden when generator knowledge would suffice.

If such testing were required, an issue would exist as to frequency of testing and how this could be determined without the type of interaction that occurs for facilities developing waste analysis plans as part of the permitting process. One possible option is to develop some type of self-implementing waste analysis plan analogous to that required for generators who treat their prohibited wastes in 90-day tanks and containers. See § 268.7(b)(4).

The Agency also solicits comment, however, whether such a testing requirement is necessary based on the following analysis of the existing rules. If a generator does no treatment of characteristic wastes, the wastes must be sent to subtitle C treatment facilities before disposal (since the wastes will still exhibit a characteristic). In this case, the wastes will be accompanied by the § 268.7(a) notice and certification telling the treater what the treatment standard for the waste is, including identification of the underlying hazardous constituents requiring treatment. Although this determination need not be based on testing, the treatment facility must do some actual testing to determine whether the treated waste meets the treatment standards, the frequency of testing to be determined by the treatment facility's waste analysis plan. § 268.7(b)(1)–(3) and 58 FR 29874. The treater would then send a notification form to the EPA Region or authorized state pursuant to § 268.9.

If a generator does some treatment, such as removing the characteristic but not treating for underlying hazardous constituents, then it would be a subtitle C treater and would be required to conduct some analysis of the waste, as just explained. If treatment is conducted in units not requiring permits, the generator must prepare a waste analysis plan "based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s)". § 268.7(b)(4)(i). Consequently, such a generator is already required to conduct some waste analysis.

EPA consequently solicits comment as to the appropriateness of a further (or perhaps, more explicit) requirement of generator testing.

B. LDR Notification

1. Constituents To Be Included on the LDR Notification

EPA solicited comment on how to limit the constituents subject to treatment to be monitored in TC wastes and hazardous soil (and thus, the ones required to be reported on the LDR notification) (see section VIII.A). Commenters on this issue when it was raised in regard to ignitable and corrosive characteristic wastes in the Supplemental Information Report prepared for the Notice of Data Availability on the *Third Third Case* generally said that the regulated community should only be required to address those constituents which are in the characteristic wastes as generated, prior to any subsequent mixing with other wastes, and the generators should monitor only for those hazardous constituents reasonably expected to be present in the characteristic waste. This is the approach being proposed in this rule. The determination of which constituents subject to treatment are in the waste may be made based on a one-time analysis of the waste to determine which of the constituents subject to treatment are present, or it may be made based on knowledge of what constituents are reasonably expected to be present in the waste. Supporting documentation for the determination should be kept in the generator's on-site files for five years. (See § 268.7(a)(7).) This approach for determining which constituents are present in the waste is not necessarily the approach that will be taken in future rulemakings.

2. Management in Subtitle C-Regulated Facilities

The Agency has information that many of the TC wastes that are not managed in CWA or SDWA systems are being treated in hazardous waste management units (primarily incinerators) subject to RCRA subtitle C. Hazardous soil contaminated with listed hazardous wastes and, perhaps, some characteristic wastes, will oftentimes be treated in a subtitle C unit. In such a case, the notification, certification, and recordkeeping requirements set out in 40 CFR 268.7 apply. This means, generally, that a notification would be prepared for each waste shipment sent from the generator to the treatment facility, in the same manner that such paperwork follows a listed waste from "cradle to grave."

For TC wastes and characteristic hazardous soils, once the waste is no longer hazardous, however, the only further recordkeeping and documentation required is set out in 40 CFR 268.9. Section 268.9 requires that the generator/treater (including generators who treat, see 51 FR at 40598, November 7, 1986) prepare a one-time notification which is sent to the EPA Region or authorized state and also kept in the generator or treater's files. The notification must include the

name and address of the subtitle D facility receiving a waste shipment, a description of the waste initially generated, and the treatment standard to which the waste is subject (see § 268.9(d), as amended at 57 FR 37271 (August 18, 1992)). For TC wastes and hazardous soils, these would be universal treatment standards. These treaters must certify that they are familiar with the treatment process used at their facility and that the process can successfully treat the waste to meet the treatment standards without impermissible dilution. See § 268.7(b)(5), which applies to persons who treat formerly characteristic wastes (see § 268.9(d)(2)). The Agency believes that, normally, at least some waste analysis is needed to make a good faith showing for meeting the treatment standards, given the number of hazardous constituents that could be covered by those standards.

It is important to state that in addition to other waste codes that are currently required to be included on notifications under § 268.7, generators of TC wastes that are managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems and in hazardous soil must identify the constituents subject to treatment along with the corresponding constituent universal treatment standards.[1]

3. Potential Management of Decharacterized Wastes at a Subtitle D Waste Management Facility

EPA is soliciting information on certain potential waste management practices for decharacterized TC wastes and soils to help determine whether new notification requirements are needed. The Agency wishes information on whether generators or treaters, after removing the characteristic, send the decharacterized TC waste or soil off-site to a subtitle D (nonhazardous waste) treatment facility for further treatment to address the underlying hazardous constituents subject to treatment. Although the initial generator of the waste would have to comply with § 268.9, there is no current requirement that the generator notify a subtitle D nonhazardous waste treater of the constituents subject to treatment in the waste, or for the subtitle D treater to verify compliance with the treatment standards or to notify the ultimate disposal facility as to the constituents in the waste. If such waste management arrangements currently exist or are likely to occur as a result of today's rule when it is finalized, some wastes would not be subject to the LDR notification requirements, as was described in the interim final rule of May 24, 1993 (58 FR 29874). Without such recordkeeping, EPA might have difficulty enforcing treatment standards for the constituents subject to treatment. However, these requirements would impose an additional burden on generators, especially those that have established alternative arrangements to provide this information to treaters. EPA solicits comment as to the potential enforcement concerns if there is not a federal requirement that generators notify subtitle D treatment and disposal facilities receiving decharacterized wastes.

Generators and subtitle D facilities may have substantial incentives to exchange and verify compliance with treatment standards for underlying hazardous constituents independently of regulatory requirements. Generators and subtitle D facilities, for example, are subject to CERCLA liability for their waste management practices. Therefore, the Agency solicits comment on whether it should consider a federally-mandated notification requirement. If a notification gap exists, one option would be to require that generators or treaters that decharacterize TC wastes or hazardous soil provide any subsequent treaters of that waste with a list of the underlying hazardous constituents subject to treatment that the waste contains, and for the final treater to provide a one-time notification to EPA.

IX. Further Solicitation of Comment Regarding Exclusion of Hazardous Debris That Has Been Treated by Immobilization Technologies

A. Background

The final Phase I Land Disposal Restrictions (LDR) rule promulgated on June 30, 1992 (57 FR 37194, August 18, 1992), excludes from subtitle C control hazardous debris that is treated using an extraction or destruction technology provided the treated debris meets the performance standards specified in § 268.45 Table 1. Our basis for doing this is that the debris no longer contains the hazardous waste. On the other hand, hazardous debris treated by an immobilization technology is still subject to the hazardous waste regulations because the Agency has insufficient data or information to support that such treated debris would not leach Appendix VIII constituents over time in a manner that would be protective to human health and the environment. In our proposal to the Phase I LDR rule, the Agency solicited comment on whether immobilized hazardous debris should be excluded from subtitle C control. While the Agency received favorable comments on excluding such treated debris from the hazardous waste regulations, no information or data was provided to support such a position. Therefore, the final rule requires that immobilized hazardous debris continue to be managed as a hazardous waste.

The Agency again wants to revisit the issue of whether immobilized hazardous debris, if treated in certain ways or is treated to meet certain limits, should be excluded from subtitle C control. As a result, since the promulgation of the Phase I LDR rule, the Agency has undertaken a number of activities.

B. Roundtable Discussion

In an attempt to gather information on the issue, the Agency sponsored a roundtable discussion on August 3, 1992. Participants at the meeting included persons who commented on the Phase I LDR rule, debris treatment vendors, hazardous waste treaters and disposers, state officials, and officials from the Department of Energy (see Docket for specific list of attendees). Representatives from the environmental interest groups were also invited but were unable to attend. The purpose of the meeting was to gather information and discuss various regulatory approaches that would allow the Agency to exclude immobilized hazardous debris from subtitle C control. While no specific information was gathered, there was a discussion on the types of standards that could be applied such as design and operating standards, leach test, structural integrity test, permeability test for encapsulating material, so as to exclude immobilized hazardous debris from hazardous waste control. Additionally, the following points were also made by one or more participants at the roundtable.

- A number of the attendees indicated that even if immobilized hazardous debris were excluded from hazardous waste control, it would continue to be managed as a hazardous waste due to CERCLA liability concerns.
- There was some question whether a specific exclusion for immobilized hazardous debris was necessary or whether the Hazardous Waste Identification Rule (HWIR) may be a

[1] An important issue that was discussed at the January 13–14, 1993, LDR Evaluation Project Roundtable meeting was the notification/recordkeeping requirements that are currently in place. Today's proposed rule would add certain requirements to the existing notification/recordkeeping system. In response to the concerns expressed by Roundtable participants and the streamlining and clarification efforts initiated in section III.C.3, however, the Agency will examine all the notification/recordkeeping requirements of the program to see if they can be simplified.

more appropriate mechanism for addressing this issue.

• A representative from the glass industry suggested that glass cullet and vitreous materials should have a separate treatment standard. He indicated that the glass matrix would not leach lead at a higher rate than would an immobilized product—that is, it made little sense to grind up the glass material and then to stabilize it when the original matrix is just as sound.

While no consensus was reached, the following principles were generally arrived at by most of the participants at the meeting.

Microencapsulation: Participants at the meeting seem to believe that using a leach test may be more appropriate to demonstrate effective microencapsulation immobilization over an approach of developing design and operating standards. It was noted that treatment of hazardous debris is very waste and debris specific; if one could define design and operating standards that were generally applicable, they would likely be too burdensome in many cases.

Macroencapsulation/Sealing: The participants seem to indicate that the grinding requirement in the TCLP leach test made it inappropriate for predicting performance of macroencapsulation/sealing immobilization technologies. These technologies rely on an impermeable coating applied to the outside of the debris. Rather, the participants suggested a structural test to determine whether the given debris/technology combination was sufficient to maintain the coating or a permeability test for the coating media. While the participants conceptually believed that such an approach was workable, no one was able to suggest a specific test or standard. In addition, it was felt by some of the participants that the development of such a test could be difficult to develop.

The Agency specifically solicits comments on the general principles described above. While no data or information was provided at the meeting, it was indicated that if such information was submitted to the Agency, the Agency would consider such information in making its decision.

C. EPA Investigations

In addition to the above roundtable discussions, EPA has also been reviewing the literature and talking to vendors in an effort to obtain sufficient information on how to propose standards that could allow the exclusion of immobilized hazardous debris. To date, no useful insights have been gained on how to specify design and operating standards that would ensure that immobilized hazardous debris was non-hazardous; the reason for this is the paucity of experience in immobilizing hazardous debris. Nevertheless, the Agency is interested in pursuing this area and specifically seeks assistance from the regulated community on this issue.

D. Conclusions

While the Agency has a better sense of the types of standards that may be appropriate for excluding immobilized hazardous debris from subtitle C control, the Agency still does not have the data to propose specific exclusions. In particular, for microencapsulation, if a leach test is the most appropriate mechanism for determining whether such treated debris is non-hazardous, the Agency believes that HWIR may be the appropriate rulemaking to address this issue. The Agency has a series of studies underway and is currently evaluating comments and is not in a position to determine what such levels are at this time. With respect to macroencapsulation/sealing, additional data or information will need to be gathered before the Agency is in a position to exclude this type of immobilized hazardous debris. To assist the Agency in this effort, we specifically solicit comment on the following questions:

Microencapsulation: Is the use of a leach test for excluding immobilized hazardous debris more appropriate than specification of design and operating standards? Is exclusion of immobilized hazardous debris using design and operating standards workable?

Macroencapsulation/Sealing: What type of structural or other test could be used? What type of criteria should be applied in determining whether such debris is non-hazardous? The Agency is considering allowing stabilization for soils containing low levels of organic constituents, and solicits comment on whether similar stabilization techniques or tests to ensure the effectiveness of such stabilization would be appropriate for excluding debris from subtitle C control.

In addition, the Agency specifically solicits comment on any data or information that is available to demonstrate that immobilized hazardous debris (if treated properly) would not pose a substantial hazard to human health and the environment. If such information is submitted to the Agency, the Agency will exclude such debris from subtitle C control.

X. Modifications to Hazardous Waste Recycling Regulations

A. Introduction

This proposal also includes changes to the hazardous waste recycling regulations which amend an exclusion (and related variance) which would allow streamlined regulatory decisions to be made regarding the regulation of certain types of recycling activities. These procedures should allow environmentally beneficial recycling to occur more easily. (This part of today's proposal is, however, not directly related to the proposed rules establishing prohibitions and treatment standards for hazardous wastes.)

EPA wishes to note that the changes to the definition of solid waste being proposed today are fairly narrow in scope. The Agency has also initiated a public dialogue process, administered by EPA's Definition of Solid Waste Task Force, which is examining the overall impacts of the RCRA program on recycling, and which will ultimately consider broader changes to the definition of solid waste.

B. Modification of the Existing "Closed-Loop" Recycling Exclusion and Related Case-Specific Variance

1. Existing "Closed-Loop" Recycling Exclusion and Related Variance

In the January 4, 1985 final rule, the Agency promulgated an exclusion from the definition of solid waste at § 261.2(e)(1)(iii) for secondary materials that are recycled in a "closed-loop," (i.e., returned to the original production process in which the material was generated (see preamble discussion at 50 FR 639)). To be considered such a "closed-loop" process, three conditions must be met. First, the secondary material must be returned to the original process without undergoing significant alteration or reprocessing (i.e., it must be returned without first being reclaimed). Second, the production process to which the unreclaimed material is returned must be a primary production process (i.e., a process that uses raw materials as the majority of its feedstock, as opposed to a secondary process that uses spent materials or scrap metal as the majority of its feedstock). And third, the secondary material must be returned as a feedstock to the original production process and must be recycled as part of that process (as opposed to an ancillary process such as degreasing). EPA believes that these conditions characterize a material that is part of an on-going production process, and as such, the management of the material should not be characterized as

waste management (i.e., the material is not part of the waste management problem).

The Agency is today proposing to readdress the second condition—that the production process to which secondary material is returned must be a primary process. The Agency imposed this condition due to considerations regarding jurisdiction, as it was understood in 1985, rather than to an evaluation of the potential impacts on the environment from closed-loop recycling involving secondary processes (i.e., this condition was established without a consideration of whether such secondary materials would be part of the waste management problem). By definition, a secondary process uses waste materials as its principal feedstock. Thus, the Agency concluded that the process residue, which is returned to the original process as a substitute for feedstock that is itself waste, is no less a waste than the waste material originally introduced (see 50 FR 639). (The Agency notes that in most cases this condition has no impact on the recycling of residues from secondary processes because such residues that exhibit a characteristic of hazardous waste (i.e., characteristic by-products and sludges) are already excluded from the definition of solid waste if reclaimed).

While the Agency continues to believe that the jurisdictional logic behind this condition is sound, the Court opinions regarding RCRA jurisdiction allow more weight to be given to environmental considerations. *API* v. *EPA*, 906 F.2d at 740–41; *AMC* v. *EPA*, 907 F2d 1179, 1186 (D.C. Cir. 1990). EPA has reevaluated this condition of the exclusion from the definition of solid waste due to its impact on the recycling of residues from secondary processes, in particular secondary lead smelters, and has determined that this condition is less relevant as an environmental consideration, assuming that the secondary material is well-managed prior to reprocessing. Therefore, the Agency is proposing to remove this condition from the "closed-loop" recycling exclusion. By doing this, secondary materials that are recycled in secondary production processes can be excluded from the definition of solid waste, provided that the materials are well-managed prior to recycling. The discussion of K069 wastes below illustrates the need for this amendment.

Following the same reasoning, the Agency is also proposing to amend § 260.33(b), a related case-by-case variance for materials that are reclaimed prior to reuse in the original primary production process from which they were generated (see 50 FR 652 for a discussion of the existing variance). The amendment would similarly expand the variance to make it available for materials that are returned to secondary processes, as well as those returned to primary processes.

2. K069 Wastes Recycled Back into the Secondary Process

In the case of K069 wastes (emission control dust/sludge from secondary lead smelting), the Agency identified thermal recovery of lead in secondary smelters (the same process that generates the waste) as BDAT in the Land Disposal Restrictions for the First Third Scheduled Wastes final rule (53 FR 31138; August 17, 1988). The treatment standard based on BDAT was expressed as "No Land Disposal" because the Agency believed the K069 waste to be "indigenous" to the smelting process and thus was no longer a solid waste within RCRA jurisdiction when introduced into the secondary smelter (which had been a long-standing policy regarding the reclamation of K069 waste, as stated in the November 29, 1985 preamble, 50 FR at 49167.) Therefore, the slag residue from the recovery of the K069 waste would not be derived from a solid waste and would thus not be a listed waste (but would be considered hazardous waste if it exhibited a hazardous characteristic.) (This view is also evident in the June 1, 1990 Land Disposal Restrictions for Third Third Scheduled Wastes final rule. In the preamble discussion regarding BDAT for wastes that exhibit the characteristic of toxicity for lead, the slag from secondary lead smelters is evaluated as a characteristic waste rather than a derived-from K069 waste (see 55 FR 22566–568; June 1, 1990).)

However, on June 26, 1990, the D.C. Circuit Court held in *American Petroleum Institute* v. *EPA*, 906 F.2d 726 (D.C. Cir. 1990) that EPA erred in disavowing the statutory authority to establish treatment standards for a slag residue of an "indigenous" waste and that RCRA jurisdiction could, in fact, extend to the slag. As a result of the mandate in that case, unless the Agency takes affirmative steps to otherwise exclude it, the slag resulting from the reclamation of K069 waste would likewise be a K069 hazardous waste, see 56 FR at 41165 (August 19, 1991), a result the Agency never intended.

The Agency notes that this would not be the outcome if the emission control dust was generated by a primary lead smelter and was recycled back into the original generating process. Such a sludge would be excluded from the definition of solid waste under 40 CFR 261.2(e)(1)(iii). The difference between the regulatory requirements applicable to the residues of primary processes and residues of secondary processes seems superfluous and is difficult to defend from an environmental standpoint because the residues of a secondary process that are recycled back into the process are no more of a waste management problem than the residues of a primary process recycled in a similar manner.

Therefore, the Agency proposes to modify the existing exclusion for secondary materials that are recycled back into the original process without prior reclamation to include those materials that are recycled back into secondary processes.

3. Storage Prior to Recycling

The Agency also proposes to condition the modification to the "closed-loop" exclusion (and the related 260.30(b) variance) such that secondary materials recycled back into secondary processes from which they were generated continue to be managed in an environmentally sound manner. Absent this condition, one possible outcome could be that a listed waste that is currently required to be managed in a protective manner (i.e., without land disposal) would begin to be managed in an unprotective manner because, as an excluded secondary material, no regulatory requirements would apply. The Agency is requiring sound management (i.e., management that is designed to contain the material or otherwise prevent its release to the environment) as a condition of this exclusion in order to keep this form of recycling from becoming part of the waste disposal problem, and to avoid a reduction in environmental protection from that currently existing. In particular, the Agency wishes to ensure that no land disposal of any excluded material occurs. EPA believes the *API* and *AMC II* cases discussed above support such an approach.

For example, under the current regulations, K069 waste is required to be managed in an environmentally sound manner prior to recycling. As a listed waste, it must be managed in storage units that meet specified criteria. And, as a waste subject to the land disposal restrictions, K069 waste may not be placed on the land, for example in open waste piles, until the applicable treatment standard has been met. However, as a secondary material that is excluded from the definition of solid waste because it is recycled back into the process from which it was generated, hazardous waste

management standards and the land disposal restrictions would not apply. (The Agency notes that such recycling is also the applicable treatment standard for K069 and that there is no conventional disposal alternative.)

The Agency solicits comment on broadening the "closed-loop recycling" exclusion and the related 260.30(b) variance to include secondary materials recycled into a secondary process. The Agency also solicits comment regarding the condition that such secondary materials from a secondary process be excluded only provided that the materials are managed such that the excluded material does not become part of the waste management problem, in particular, that there be no direct placement of materials on the land, and also solicits comments regarding whether all exclusions from the definition of solid waste should be conditioned on sound management practices.

XI. Implementation Issues

During the LDR Roundtable on January 14 and 15, 1993, participants expressed a need for more information to help implement regulations as they are issued. The Agency is specifically soliciting comments on possible implementation issues regarding the provisions being proposed today.

XII. Capacity Determinations

This section presents the data sources, methodology, and results of EPA's capacity analysis for today's rule. Section A summarizes the results of the capacity analysis for the wastes covered by this proposal; Section B summarizes the analysis of available capacity; Section C presents the results of the capacity analysis for surface disposed newly identified and listed wastes; Section D summarizes the capacity analysis for wastes mixed with radioactive contaminants; Section E summarizes the results of the capacity analysis for high TOC ignitable and TC pesticide wastes and newly listed wastes injected into Class I deep wells; and Section F presents the results of the capacity analysis for hazardous soil and debris contaminated with the newly listed and identified wastes covered in this proposal and for hazardous soil contaminated with Phase I wastes.

In general, EPA's capacity analysis methodologies focus on the amount of waste currently land disposed that will require alternative treatment as a result of the LDRs. Land-disposed wastes that do not require alternative treatment (e.g., those that are currently treated using an appropriate treatment technology) are excluded from the quantity estimates. In addition, wastes managed in CWA, SDWA, CWA-equivalent systems are not included in this rule and will be addressed in an upcoming rulemaking.

EPA's decisions on whether to grant a national capacity variance are based on the demand for commercial treatment or recovery technologies. Consequently, the methodology focuses on deriving estimates of the quantity of wastes that will require commercial treatment as a result of the LDRs—quantities of waste that will be treated on-site or by facilities owned by the same company as the generator are omitted from the required commercial capacity estimates.

The major capacity information collection initiative for this proposal was an EPA survey of all land disposal facilities that manage newly identified TC organic wastes (including TC-contaminated soil and debris) in land-based units. The survey, conducted in the spring of 1992, is a census of approximately 140 facilities. EPA identified the universe primarily based on those facilities that had submitted permit modifications or received interim status for managing these wastes. For each facility, EPA requested wastestream specific data on newly identified TC organic wastes and information on on-site land disposal units and treatment and recovery systems.

EPA developed a data set of the information on the survey results. Specifically, the data set contains information on the quantities of newly-identified organic TC wastes that will require commercial treatment capacity as a result of the LDRs. The data collected from the survey to date have been used for the required capacity estimates and are part of the docket for today's proposed rule. Additional analysis may revise the required capacity estimates for the final rule.

A. Capacity Analysis Results Summary

For the organic TC wastes (D018–D043), EPA estimates that 252,000 tons of newly identified organic TC sludges and solids will be managed off-site and require alternative treatment as a result of today's proposed rule.

EPA estimates that much smaller quantities of the other listed wastes included in today's proposed rule will require alternative treatment. In particular approximately 4,600 tons of coke by-products (K141–K145, K147 and K148) nonwastewaters are currently being land disposed. No K141–K145, K147 and K148 wastewaters are currently being land disposed. The majority of these nonwastewaters are likely to be recycled and, therefore, alternative treatment may not be required. Fewer than 100 tons of chlorinated toluene (K149–K151) nonwastewaters are currently being land disposed and will require alternative treatment due to the LDRs. No K149–K151 wastewaters are currently being land disposed.

The quantities of radioactive wastes mixed with wastes included in today's proposed rule and currently being land disposed are uncertain.

EPA has very limited information which differentiates high TOC D001 ignitable wastes from low TOC D001 ignitable wastes, particularly with reference to the type of Class I injection well (i.e., nonhazardous versus hazardous) the wastes are disposed into. However, the information the Agency does have indicates that both D001 ignitable wastes and D012–D017 TC pesticide wastes are deep well injected into Class I hazardous wells with no-migration petitions. EPA estimates that, based on management practices, little if any diluted high TOC ignitable waste is injected into Class I nonhazardous wells, and no more than 419 tons of D012–D017 pesticide wastes are deep well injected into class I wells without no-migration petitions.

EPA estimates that 3 million tons of hazardous soil contaminated with previously regulated wastes are presently land disposed without prior treatment.[2] The Agency also estimates that 234,000 tons of hazardous soil and 34,000 tons of hazardous debris contaminated with the newly identified organic TC wastes are currently being managed off-site and will require alternative treatment.

In addition, EPA expects a one-time generation of hazardous soil contaminated with F037 and F038 petroleum refining wastes of approximately 180,000 tons in 1994. This one-time generation is due to the cleanout or closure of surface impoundments at petroleum refineries. The estimation of 180,000 tons was based upon information submitted to EPA by petroleum refineries and an assessment of "typical" quantities of soil excavated during impoundment closures. Absent additional information, EPA expects a proportionate number of these surface impoundment closures to be completed prior to the effective date

[2] These wastes include soil contaminated with Third Third wastes that were granted a two-year capacity variance in the Third Third rule (55 FR 22520). This national capacity variance expired on May 8, 1992. However, the Agency granted a national case-by-case extension to hazardous soil contaminated with Third Third wastes which expired May 8, 1993.

of this rulemaking. Thus, EPA estimates approximately 90,000 tons of hazardous soil contaminated with F037 and F038 would require treatment as a result of this rulemaking. EPA requests comments on the timing of the surface impoundment closures and the affected quantities of wastes.

Table 1 lists each waste code for which EPA is proposing LDR standards today. For each code, this table indicates whether EPA is proposing to grant a national capacity variance for surface-disposed wastes. EPA is not proposing to grant a national capacity variance for newly identified organic TC wastes. However, the Agency is proposing to grant two-year national capacity variances for mixed radioactive wastes (i.e., radioactive wastes mixed with newly identified TC organic constituents D018–D043), for hazardous soil and debris contaminated with newly listed and identified wastes covered under this proposal, and hazardous soil contaminated with Phase I wastes. EPA is also proposing to extend the effective date for compliance with treatment standards for all waste codes covered by this rulemaking by granting a three-month national capacity variance. This extension would not apply to wastes with a specified longer national capacity variance. EPA is proposing to delay the effective date because the Agency realizes that even where data indicate that sufficient treatment capacity exists, such capacity may not be immediately available. Additional time may be required to determine what compliance entails, redesign tracking documents, possibly adjust facility operations, and possibly segregate wastestreams. EPA believes these legitimate delays can be encompassed within a short-term capacity variance because the ability to get wastes to the treatment capacity in a lawful manner is an inherent part of assessing available capacity.

EPA's recently promulgated final rule addressing corrective action management units (CAMUs) and temporary units (Tus) (published February 16, 1993 at 58 FR 8658) is likely to reduce the quantity of remediation wastes and soil subject to the land disposal restrictions by reducing the quantity of remediation waste and soil excavated and also by reducing the volume of material managed off-site. As a result, the CAMU/TU rule is likely to free up current hazardous waste treatment and disposal capacity and reduce the demand for future capacity.

In summary, the CAMU/TU rule is designed to facilitate RCRA corrective actions and CERCLA remediations by providing that remediation wastes managed within CAMUs and Tus will not be subject to the RCRA land disposal restrictions requirements. The CAMU rule does not apply to wastes generated from ongoing production processes or other industrial activities; it applies only to remediation wastes managed in implementing remedial actions. For example, under the final CAMU provisions, remediation wastes may be excavated from several isolated areas at a facility, treated in a central location on-site, and disposed in a CAMU without triggering the LDRs or other RCRA land disposal unit requirements. CAMUs can be used only at facilities regulated under subtitle C of RCRA, at CERCLA sites where determined to be applicable or relevant and appropriate requirements (ARARs), and under some state remedial programs (i.e., CAMUs cannot be used at facilities that are not currently remediating under federal or state authorities) and can be used only with the permission of the permit writer.

As a result, EPA believes that the CAMU rule will reduce the volume of remediation waste requiring treatment to LDR standards. In particular, incineration and off-site management are likely to be used less frequently than they currently are, while on-site management of in-situ and excavated soil will increase. Although estimates of the quantity of remediation waste and hazardous soil that will be affected by the CAMU is unknown, EPA estimates that about 1,500 facilities subject to the RCRA corrective action requirements will use CAMUs.

TABLE 1—VARIANCES FOR NEWLY LISTED AND IDENTIFIED WASTES

["Yes" Indicates EPA is Proposing to Grant a Variance]

Waste Type	Disposal Unit				
	Landfill	Land treatment	Surface impoundment	Waste pile	Deepwell
High TOC D001 Wastes	No	No	No	No	No
D012–D017 Wastes[a]	No	No	No	No	No
D018–D043 Nonwastewaters	No	No	No	No	N/A
K141–K145 Wastes	No	No	No	No	No
K147–K148 Wastes	No	No	No	No	No
K149–K151 Wastes	No	No	No	No	No
Mixed Radioactive	Yes	Yes	Yes	Yes	N/A
Soil (Prev. Regulated Wastes)[b]	No	No	No	No	N/A
Soil (Phase I Wastes)	Yes	Yes	Yes	Yes	N/A
Soil (Phase II Wastes)[c]	Yes	Yes	Yes	Yes	N/A
Debris (Phase II Wastes)[c]	Yes	Yes	Yes	Yes	N/A

N/A means Not applicable.

[a] Newly identified TC wastes that were not previously hazardous by the old EP Leaching Procedure.

[b] EPA has previously granted a two-year national capacity variance to soil contaminated with previously regulated wastes.

[c] EPA is proposing to grant a two-year national capacity variance for hazardous soil and debris contaminated with Phase II wastes, including mixed radioactive/Phase II wastes.

B. Analysis of Available Capacity

The analysis of commercial capacity for newly identified wastes is based primarily on the TSDR Survey capacity data set, data received in response to previous LDR notices and regulations, and data received in voluntary data submissions. These data include estimates of available capacity at commercial combustion facilities (i.e., incinerators and boilers and industrial furnaces (BIFs)), other conventional treatment facilities, and innovative technology vendors.

Combustion capacity. Combustion capacity for liquid hazardous wastes has historically been more readily available

than capacity for sludges and solids. Commercial capacity for combustion of sludges and solids is available at both incinerators and industrial furnaces (primarily cement kilns that are authorized to accept hazardous waste). Because of the new regulations and policies regarding the burning of hazardous wastes in boilers and industrial furnaces, many commercial cement kiln facilities are currently changing their operational practices. The effect of these new combustion controls and other changes will be addressed in future revisions to capacity estimates for wastes regulated in this final rule.

The types of wastes cement kilns are able to burn are limited by air emission limits, feed system limitations, and product (i.e., cement) quality considerations. For instance, cement quality considerations generally require that wastes burned in cement kilns have a heating value of at least 5,000 Btu/lb. In addition, combustion capacity may be limited by chemical characteristics, constituent levels, and physical properties of the waste.

Information available to EPA indicates that at least 192,000 tons/year of commercial combustion capacity are available for all newly identified TC organic sludges and solids, including soil and debris. However, EPA recently received data from the Hazardous Waste Treatment Council (HWTC) stating that a survey of their members showed approximately 300,000 tons of incineration capacity is currently available for solids. If the available capacity for cement kilns is added to this figure and the additional capacity required after the expiration of the F037/38 variance is subtracted, there would be approximately 334,000 tons of sludge/solids combustion capacity available. This quantity of available capacity takes into account capacity that will be required for Phase I wastes that were granted a national capacity variance (57 FR 37194, August 18, 1992), ignitable and corrosive wastes whose treatment standards were vacated (58 FR 29860, May 24, 1993), waste characteristics that affect the ability for a particular facility(s) to treat the wastes, and other factors that may limit capacity.

In the comments submitted in response to the October 24, 1991 Advanced Notice of Proposed Rulemaking (ANPRM), several commenters raised issues regarding EPA's methodology for determining available capacity. Commenters proposed that EPA should not consider planned capacity since new facilities and facility expansions are commonly delayed; not include capacity from facilities that violate environmental regulations; account for the expiration of capacity variances granted for combustion in the Third Third rule; and account for actual operating time in its assessment of a facility's available capacity. These factors were taken into account in the capacity analysis where appropriate.

Three commenters also reported ongoing data collection efforts that might provide additional information on available capacity in the near future. These efforts include surveys being conducted by the HWTC to determine its members' sludge and solid combustion capacity and their capacity to treat soil; the Cement Kiln Recycling Coalition on cement kiln dust issues that may contain information on the waste-burning practices at cement kilns; and Oak Ridge National Laboratories of mixed radioactive waste generators to assess mixed radioactive waste treatment capabilities. EPA has received confirmation that HWTC and the CKRC are planning to survey their members on available combustion capacity. Because of time constraints, this new information will be summarized and included in the Docket to today's proposed rule and will be considered in the capacity analysis for the final rule.

A few of the comments received on the ANPRM noted factors that may limit the applicability of commercial combustion for certain TC wastes. One commenter emphasized that EPA must consider certain external factors that can limit incineration capacity, including waste characteristics, such as heating value and chlorine content, that might affect waste acceptability; limitations imposed on wastes, such as TC wastes, which are often managed as bulk solids; packaging and transportation limitations; limited temporary storage space at certain facilities; and regulatory obstacles to permitting new incinerators. EPA requested information on these factors in the survey of facilities that manage organic TC wastes, including soil and debris, in land-based units. This information has been and will be re-evaluated and taken into account in the capacity analysis for the final rule.

Other potential capacity limitations noted in the comments were equipment problems at commercial facilities that can cause disruption in waste acceptance, and the Boiler and Industrial Furnace (BIF) rule which may potentially limit combustion capacity at cement kilns. One commenter also noted that if the cement produced by a kiln that burns listed hazardous wastes is subject to LDR standards, then cement kilns should not be considered in available capacity estimates.

EPA is also considering the capacity effects of recent court decisions regarding the regulation of hazardous constituents other than those for which the waste fails the TC test. EPA solicits comments on the treatment capacity effects of requiring facilities to treat the underlying hazardous constituents in TC organic hazardous wastes to meet the proposed universal treatment standards.

EPA will analyze the results of the combustion surveys that will be conducted by the Hazardous Waste Treatment Council and the Cement Kiln Recycling Coalition, review recent regulatory developments concerning combustion facilities, and determine how much combustion capacity will be available for wastes covered by this rule when it becomes effective.

Other conventional treatment technologies. There are three primary conventional commercial treatment technologies for the newly identified and listed wastes besides combustion: Stabilization, biological treatment, and chemical precipitation. EPA estimates that over 1 million tons of stabilization capacity, 187,000 tons of biological treatment capacity, and 813,000 tons of chemical precipitation capacity are currently available. In analyzing alternative treatment capacity for stabilization, biological treatment, and chemical precipitation for newly identified and listed wastes, the Agency built on the capacity analysis conducted for the Third Third LDR rule. This analysis was based on data contained in the TSDR Capacity Data Set which contains results from the National Survey of Hazardous Waste Treatment, Storage, Disposal and Recycling Survey (the TSDR Survey).

Innovative technologies. There are several innovative technologies for the treatment of hazardous soil including hydrolysis, vacuum extraction, photolysis, and oxidation. To the extent that these technologies can be used to treat hazardous soil on-site, the required capacity for combustion will decrease. EPA has limited information on innovative technologies with regard to both available capacity and to limitations of the technologies or constraints on the use of these technologies. EPA solicits comments on the use of innovative technologies for the treatment of hazardous soil. Specifically, EPA requests information on constraints on the use of these technologies both on- and off-site, including physical or chemical characteristics of the soils, and logistical constraints such as permitting.

scheduling, etc. EPA also solicits data on volumes of hazardous soil currently being treated by these technologies, current available capacity, and estimates of future capacity.

C. Surface Disposed Newly Identified and Listed Wastes

1. Required Capacity for Newly Identified TC Organics (D018–D043)

The Agency is proposing to develop treatment standards for TC organic nonwastewaters based primarily on incineration performance data. Newly identified organic TC wastewaters that are managed in systems other than those regulated under the CWA, those regulated under the SDWA that inject TC wastewaters into Class I injection wells, and those zero discharge facilities that engage in CWA-equivalent treatment prior to land disposal are also affected by today's proposed rule. (Organic TC wastewaters managed in CWA, SDWA, or CWA-equivalent systems will be addressed in future rulemakings, and EPA will make variance determinations at that time.) The Agency does not have data indicating that facilities managing organic TC wastewaters would be impacted. EPA solicits comments on the quantities of newly identified organic TC wastewaters affected by today's proposed rule.

EPA developed estimates of the quantities of newly identified TC organic wastes based on current management options to comply with the LDR requirements. The Agency also developed estimates of available on-site treatment and recovery capacity. Table 2 summarizes available capacity for each alternative treatment or recovery technology required for the newly identified Toxicity Characteristic nonwastewaters. The table also summarizes the required capacity for each technology. A comparison of required and available treatment capacity indicates that adequate treatment capacity exists for new TC nonwastewaters. Therefore, EPA is not proposing to grant a national capacity variance for D018 through D043 nonwastewaters. EPA is requesting comments and any additional data on its assessment that there is adequate treatment capacity for these wastes.

Table 3 presents the 1993 quantities of TC nonwastewaters requiring off-site treatment by waste code.

TABLE 2.—REQUIRED AND AVAILABLE CAPACITY FOR NEWLY IDENTIFIED ORGANIC TC WASTES[1]

[All quantities are in tons]

Treatment technology	Available capacity	Required capacity
Chemical precipitation	[2] 813,000	10,000
Liquid combustion	541,000	[3] 11,000
Sludge/solid combustion	334,000	253,000
Stabilization ..	[4] 1,127,000	41,250

[1] Does not include hazardous soil and debris, mixed radioactive wastes, or deepwell injected wastes.
[2] Capacity analysis for the Third Third rule.
[3] These are liquid nonwastewaters.
[4] Capacity analysis for the proposed Phase I Newly Listed and Newly Identified Waste rule.

Table 3.—1993 QUANTITIES OF TC NONWASTEWATERS REQUIRING OFF-SITE TREATMENT

[Surface Disposed Wastes in Tons]

Code	Nonwastewaters
D018	152,990
D019	8,510
D020	6,319
D021	8,484
D022	8,343
D023	3,897
D024	515
D025	308
D026	1,518
D027	1,142
D028	14,197
D029	3,859
D030	511
D031	203
D032	3,109
D033	450
D034	412
D035	4,216
D036	262
D037	612
D038	2,297
D039	6,900
D040	6,583
D041	108
D042	120
D043	16,482
Total	252,347

The quantities presented in Table 2 do not include used oil because in the May 1, final listing determination the Agency determined that the TC characteristic adequately defines those used oils which should be regulated as hazardous waste. Because of the TC regulation and other environmental regulation, the Agency determined that it is unnecessary to list used oil being disposed as hazardous. Thus, used oil that is not recycled and that exhibits the toxicity characteristic would be subject to the land disposal restrictions.[3] EPA has not separately quantified the amounts of used oil subject to the LDRs. The Agency requests comments on the quantities and management of the used oil that exhibits the toxicity characteristic and that is subject to the LDRs.

2. Required Capacity for Other Newly Listed Organic Wastes

This section presents EPA's analysis of required capacity for other listed organic wastes including coke by-product wastes and chlorinated toluene production wastes.

a. Surface Disposed Coke By-Product Wastes

K141 Process residues from the recovery of coal tar, including, but not limited to, tar collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).

K142 Tar storage tank residues from the production of coke from coal or the recovery of coke by-products produced from coal.

K143 Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil units from the recovery of coke by-products produced from coal.

K144 Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.

K145 Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

K147 Tar storage tank residues from coal tar refining.

K148 Residues from coal tar distillation, including but not limited to still bottoms.

For coke by-product nonwastewaters, EPA is proposing to establish concentration standards based on incineration. Under the authority of section 3007 of RCRA, EPA collected generation and management information concerning coke by-product wastes; this information was collected in 1985 and 1987. The Agency identified the following annualized quantities of wastes: 49 tons of K141 nonwastewaters, 2,750 tons of K142 nonwastewaters, 10 tons of K143 nonwastewaters, 304 tons of K144 nonwastewaters, 1,408 tons of K147 nonwastewaters, and less than 100 tons of K148 nonwastewaters. EPA identified no K145 nonwastewaters that were being land disposed. The majority of

[3] Used oil that is recycled is not subject to the land disposal restrictions. (40 CFR 261.6 (a) and (b))

K141 to K145 nonwastewaters generated during that timeframe were recycled or used for energy recovery. Tar storage tank and tar distillation bottoms may be removed periodically. The Agency is soliciting comments for the above estimated quantities which may require alternative treatment as a result of the LDRs.

Current management practices indicate that the majority of the newly listed coke by-product wastes are amenable to recycling, and therefore, alternative treatment may not be required as a result of today's proposed rule. Thus, EPA believes that adequate capacity exists to treat the small amount of wastes, if any, that require alternative treatment.

EPA does not have any information that coke by-product wastewaters are currently generated. The quantity of these wastewaters is assumed to be zero. EPA is soliciting comments on changes of management practices or generation data on these wastes.

As a result of this analysis, EPA is proposing not to grant a national capacity variance to K141, K142, K143, K144, K145, K147, and K148 nonwastewaters and wastewaters.

b. Surface Disposed Chlorinated Toluene Wastes

K149 Distillation bottoms from the production of alpha (methyl) chlorinated toluene, ring-chlorinated toluene, benzoyl chlorides, and compound with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)

K150 Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha (methyl) chlorinated toluene, ring-chlorinated toluene, benzoyl chlorides and compounds with mixtures of these functional groups.

K151 Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha (methyl) chlorinated toluene, ring-chlorinated toluene, benzoyl chlorides and compounds with mixtures of these functional groups.

For wastes generated during the production of chlorinated toluene, EPA is proposing to establish concentration-based treatment standards based on incineration for nonwastewaters. EPA collected generation and management information on wastes generated from the production of chlorinated toluene. EPA collected this information under the authority of section 3007 of RCRA during engineering site visits in 1988. This capacity analysis incorporates data from the section 3007 information request and engineering site visits. EPA identified four facilities that produce chlorinated toluene wastes.

The Agency has identified no K149 nonwastewaters, no K150 nonwastewaters, and less than 100 tons of K151 nonwastewaters that were being land disposed. For the capacity analysis, EPA assumes that these quantities are currently being land disposed and will require further treatment as a result of today's proposed rule.

EPA does not have any information that chlorinated toluene wastewaters are currently generated. The quantity of these wastewaters is assumed to be zero. EPA is soliciting comments on changes of management practices or generation data on these wastes.

Because adequate capacity exists to treat these wastes, EPA is not proposing to grant a national capacity variance for K149, K150, and K151 nonwastewaters and wastewaters.

3. Newly Identified TC Wastes That Were Not Previously Hazardous by the Old EP Leaching Procedure

In the Third LDR rule (55 FR 22520, June 1, 1990), EPA promulgated treatment standards for D012 through D017 wastes, but only for those wastes that were previously hazardous by the old EP leaching procedure and remain hazardous under the new TCLP. D012 through D017 wastes that were not hazardous by the old EP leaching procedure but are now hazardous using the new TCLP are considered newly-identified D012 through D017 wastes.

In response to the ANPRM (56 FR 55160, October 24, 1991), EPA did not receive any estimates for additional waste quantities (or newly-identified wastes) due to the use of TCLP rather than the EP leaching procedure. EPA believes that the quantities of the newly-identified D012 through D017 wastes due to the use of the TCLP rather than the EP leaching procedure are small, if any, and, hence, expects little or no additional demand for commercial treatment capacity as a result of the LDRs. Because sufficient capacity exists to treat these wastes, EPA is proposing not to grant the newly-identified D012 through D017 wastes a national capacity variance.

D. Required and Available Capacity for Newly Identified Wastes Mixed with Radioactive Components

EPA has defined a mixed RCRA/radioactive waste as any matrix containing a RCRA hazardous waste and a radioactive waste subject to the Atomic Energy Act (53 FR 37045, 37046, September 23, 1988). These mixed wastes are subject to the RCRA hazardous waste regulations, including the land disposal restrictions, regardless of the type of radioactive constituents that these wastes contain.

Radioactive wastes that are mixed with spent solvents, dioxins, California list wastes, or First Third, Second Third, or Third Third wastes are subject to the land disposal restrictions already promulgated for these hazardous wastes. EPA granted national capacity variances for all of these mixed wastes because of a lack of national treatment capacity. Today's rule addresses the radioactive wastes that contain newly listed hazardous wastes being restricted in today's proposed rulemaking.

Based on comments received by EPA in response to the ANPRM (56 FR 55160) and previous rulemakings, the U.S. Department of Energy (DOE) is the primary generator of mixed RCRA/radioactive wastes. A variety of non-DOE facilities also generate mixed wastes, including nuclear power plants, academic and medical institutions, and industrial facilities.

In response to the ANPRM, DOE developed and submitted data on its generation of mixed RCRA/radioactive wastes and its capacity available to treat such wastes. To update and refine its data, DOE requested 37 DOE Field Organizations to identify and characterize their mixed waste streams, including developing profiles of the newly regulated TC organic waste streams. Twenty DOE Field Organizations responded to the data request and provided waste stream-specific data, including annual generation rates and the inventory of such wastes expected by May 1993. In April, 1993, this Interim Mixed Waste Inventory Report was prepared and included a national inventory of all mixed wastes that are currently stored or will be generated over the next five years, and a national inventory of mixed waste treatment capacities and technologies. The report provides waste stream-specific and treatment facility-specific information for each DOE site in each state. EPA has not completed its review of the data contained in this report, and consequently, the data were not available for use in this proposed rule. Additionally, the six-month public comment period for the Interim Report has not yet expired. EPA will update the results of the capacity analysis for the final rule with the results from the Final Mixed Waste Inventory Report.

Data on some of the other DOE facilities were derived from other data sources. DOE also submitted data gathered from its Field Organizations on the availability of its existing and

planned capacity to treat mixed RCRA/radioactive wastes, including TC wastes.

While DOE has provided its best available data on mixed waste generation, uncertainty remains about mixed waste generation at DOE (and non-DOE) facilities. For example, not all DOE Field Organizations responded to DOE's request for information. In addition, DOE recently completed an Interim Mixed Waste Inventory Report (April 1993). This information will be incorporated into the final capacity analysis. In addition, the data submitted to EPA generally did not include DOE environmental restoration wastes which, when generated, will increase the quantity of newly identified mixed wastes that require treatment.

Although DOE is in the process of increasing its capacity to manage mixed RCRA/radioactive wastes, information supplied by DOE indicates that a significant capacity shortfall currently exists for the treatment of mixed RCRA/radioactive wastes, much of which is in storage facilities awaiting treatment. DOE has indicated that it will generally give treatment priority to mixed wastes that are already restricted under previous LDR rules (e.g., radioactive wastes mixed with solvents, dioxins, California list wastes, or First Third, Second Third, or Third Third wastes.) DOE is also concerned about the availability of treatment capacity for mixed wastes that will be generated as a result of site remediation activities. EPA's review of non-DOE data sources also showed a significant lack of commercial treatment capacity.

Despite the uncertainty about quantities of mixed radioactive wastes containing newly listed and identified wastes that will require treatment as a result of today's proposed rule, any new commercial capacity that becomes available will be needed for mixed radioactive wastes that were regulated in previous LDR rulemakings and whose variances have already expired. Thus, EPA has determined that sufficient alternative treatment capacity is not available, and is proposing to grant a two-year national capacity variance for mixed RCRA/radioactive wastewaters and nonwastewaters contaminated with newly listed and identified wastes whose standards are being proposed today.

E. Required and Available Capacity for High TOC Ignitable, TC Pesticide, and Newly Listed Wastes Injected into Class I Deep Wells

As explained in previous rules concerning land disposal restrictions (see e.g., 52 FR 32450, August 27, 1987; 53 FR 30912, August 16, 1988; 55 FR 22520, June 1, 1990), EPA is allocating available capacity first to those wastes disposed in surface units, second to wastes resulting from CERCLA and RCRA clean ups, and finally to underground injected wastes. Based on this hierarchical approach, the Agency is proposing the following effective dates for injected wastes.

EPA has very limited information which differentiates high TOC D001 ignitable wastes from low TOC D001 ignitable wastes, particularly with reference to the type of Class I injection well (i.e. nonhazardous versus hazardous) the wastes are disposed into. However, the information the Agency does have indicates that both D001 ignitable wastes and D012–D017 TC pesticide wastes are deep well injected into Class I hazardous wells with no-migration petitions. EPA estimates that, based on management practices, little if any diluted high TOC ignitable waste is injected into Class I nonhazardous wells, and no more than 419 tons of D012–D017 pesticide wastes are deep well injected into Class I wells without no-migration petitions.

The following wastes are the newly listed wastes for which numerical standards are being proposed, and which current data indicate are not being underground injected:

Coke Production Wastes: K141, K142, K143, K144, K145, K147, K148

Chlorotoluene Production Wastes: K149, K150, K151

Therefore, EPA is proposing that these wastes be prohibited from underground injection upon the date of final promulgation of this rule. EPA is not proposing to grant a national capacity variance for any of these waste types. The Agency requests further comment on whether any of these wastes are being injected. Comment is also requested on what quantities of wastes are being injected, and on the characteristics of these wastes.

F. Required and Available Capacity for Hazardous Soil and Debris Contaminated With Newly Listed and Identified Wastes

This capacity analysis focuses on hazardous soil and debris contaminated with wastes whose treatment standards are proposed in this rule as well as hazardous soils contaminated with Phase I wastes.

Based on data currently available, EPA estimates that 3 million tons of hazardous soil contaminated with previously regulated wastes are presently disposed in hazardous waste landfills without prior treatment. These wastes were granted a two-year national capacity variance in the Third Third rule (55 FR 22520) which expired in May 1992. However, EPA granted a one-year national case-by-case extension for hazardous soil contaminated with previously regulated wastes requiring treatment by incineration, retorting, or vitrification. This variance expired in May 1993. Consequently, these wastes may undergo treatment prior to land disposal. In order to determine the capacity available to treat newly listed and identified hazardous soil, EPA must consider the impact that the treatment of hazardous soil contaminated with wastes regulated in previous LDR rulemakings will have on available commercial capacity. EPA used several data sources to estimate the total quantity of land-disposed hazardous soil and debris. These sources include: responses to the Advance Notice to the Proposed Rulemaking (ANPRM) for the newly identified wastes (56 FR 55160); the newly developed TC data set discussed earlier; information provided during a series of roundtable meetings held by the Agency in May and June of 1991 with representatives of companies involved in the management and disposal of hazardous debris and soil; the Biennial Reporting System (BRS); Records of Decision (RODs) of Superfund sites; the National Survey of Treatment, Storage, Disposal and Recycling Facilities (TSDR Survey); and the National Survey of Hazardous Waste Generators.[4]

In general, EPA found severe limitations in estimating the total quantity of hazardous soil because the available data are incomplete and poorly defined. The reason for this lack of comprehensive data is several-fold: First, the regulated community reported that their data generally are not classified by soil but rather by waste code and waste description; second, the data from the TSDR and Generator Surveys were not collected and categorized specifically for soil, and soil was often mixed with debris[5] and was frequently contaminated with more than one waste, thereby making the hazardous soil quantity determinations difficult; third, TSDR and Generator Surveys do not include data on hazardous soil contaminated with

[4] EPA conducted the surveys during 1987 and 1988 to obtain comprehensive data on the nation's capacity for managing hazardous waste and the volumes of hazardous waste being land disposed as well as data on waste generation, waste characterization, and hazardous waste treatment capacity in units exempt from RCRA permitting.

[5] Data submitted by TSDFs in roundtable meetings sometimes combine contaminated debris with soil. Furthermore, TSDFs have stated that historical waste data are generally not kept by soil classifications.

newly identified wastes because they were not considered hazardous wastes in 1986; and fourth, the BRS only covers active generators of hazardous waste and therefore may not capture soil volumes generated at inactive sites.

1. Waste Generation

a. *Hazardous soil.* The hazardous soil covered by this proposal includes soil contaminated with D018–D043 organic TC wastes, soils contaminated with coke-by product wastes and chlorinated toluene wastes, mixed radioactive soils contaminated with Phase II wastes, and soils contaminated with Phase I wastes. The largest quantity of hazardous soil in this proposal is from hazardous soil contaminated with D018–D043 organic TC wastes. Based on the results of the TC survey, EPA's current estimate for this quantity that will require off-site treatment is 234,000 tons per year. Table 4 presents the estimated 1993 quantities of soil and debris contaminated with newly identified TC wastes requiring off-site treatment, by waste code and type. The results of the newly developed TC data set discussed in the introductory section of this chapter have been used for these demand estimates and are part of the docket for today's rule. Additional analysis of the survey data will be incorporated in the capacity analysis for the final rule.[6]

One commenter to the ANPRM indicated that as many as 3,000 manufactured gas plants (MGP) may be generating TC-contaminated soil and debris. Most of the soil and debris generated at these plants is expected to be contaminated with benzene. While EPA acknowledges that the quantities of TC-contaminated soil from MGP are potentially large, the Agency expects that most of this quantity will be managed on-site and will not require off-site or commercial treatment capacity. EPA requests updated information on the generation and management of these wastes and on whether there will be sufficient commercial treatment services to treat these wastes on-site.

TABLE 4.—1993 QUANTITIES OF TC-CONTAMINATED SOIL AND DEBRIS REQUIRING OFF-SITE TREATMENT

[Surface Disposed Wastes in Tons]

Code	Soil	Debris
D018	161,166	27,574
D019	184	195
D020	325	16
D021	29,760	212
D022	139	71
D023	31	57
D024	30	50
D025	30	60
D026	111	1,270
D027	1,795	244
D028	976	314
D029	1,831	324
D030	28,938	90
D031	17	13
D032	59	68
D033	60	103
D034	60	29
D035	461	293
D036	113	65
D037	336	227
D038	567	538
D039	2,789	961
D040	3,967	878
D041	17	22
D042	17	22
D043	56	85
Total	233,845	33,781

[6] The total quantity of all TC hazardous soils impacted by LDR regulations may increase as further regulations are developed for TC wastes which are deferred to future rulemakings.

EPA believes mixed radioactive soils contaminated with Phase II wastes are currently generated. For example, DOE informed EPA that mixed radioactive soil contaminated with newly identified TC organic wastes are generated at a rate of 1.5 m^3 per year. Additionally, 23.7 m^3 of TC organic mixed radioactive soils are being stored awaiting treatment. Therefore EPA does not believe there is sufficient treatment capacity for the TC organic mixed radioactive soils generated annually.

Soils for Phase I wastes are being regulated under this rulemaking. The largest source of hazardous soil contaminated with Phase I wastes are F037 and F038 wastes generated at petroleum refining facilities. EPA believes that the quantities of hazardous soil contaminated with other Phase I wastes are relatively small. EPA has received information from petroleum refineries indicating that most facilities that were managing F037 and F038 wastes in surface impoundments are modifying their operations in some way. To the extent that a proportion of surface impoundments will be closed with waste removal, hazardous soil will be generated.

Information submitted to EPA by some petroleum refining facilities indicates that many surface impoundments managing F037 and F038 wastes will be closed with waste removal and that a significant number of these closures will occur during 1994. Closures with waste removal may involve the generation of hazardous soil. Based on assessments of the "typical" quantities of soil excavated during surface impoundment closures, EPA estimates that as much as 90,000 tons of F037- and F038-hazardous soil may be impacted by this rule. EPA stresses that these quantities represent a one-time generation of soil and are not expected to recur after 1994. EPA requests comments on this estimate and the timing.

EPA estimates that approximately 3 million tons of hazardous soil contaminated with previously regulated wastes are land disposed per year. EPA believes these quantities will initially have a significant impact on the capacity available to treat newly listed and identified hazardous soil. EPA solicits comment on this quantity estimate. Comments from the roundtable meetings indicate that decommissioning of large chemical plants and increasing remediation activities can significantly increase the estimated quantity of hazardous soil.

Several commenters to the ANPRM indicated that EPA may have underestimated the annual quantities of hazardous soil generated. Some commenters provided site specific data on the quantities of soil generated during remedial actions. The Agency is incorporating these data in its analysis of the required capacity for hazardous soil. Other commenters indicated that very large quantities of hazardous soil contaminated with wood preserving wastes and with former Bevill wastes will be generated in the near future. The Agency acknowledges these comments. However, hazardous soil contaminated with wood preserving wastes and with former Bevill wastes will be addressed in a future rulemaking.

EPA notes that the promulgation of new soil standards may encourage the development of on-site treatment technologies or the increased use of innovative technologies. EPA requests comments on the use of innovative technologies for hazardous soil. Specifically, EPA requests information on constraints to the use of these technologies both on- and off-site, including physical or chemical characteristics of the wastes, and logistical constraints such as permitting, scheduling, etc.

b. Hazardous debris. This rule covers debris contaminated with the newly listed and identified wastes covered in this proposal. An examination of the data from the TC survey indicates that approximately 34,000 tons of debris

contaminated with D018–D043 wastes may be currently land disposed.

EPA believes mixed radioactive debris contaminated with Phase II wastes are currently generated. For example, DOE informed EPA that mixed radioactive debris contaminated with newly identified TC organic wastes are generated at a rate of 46.36 m^3 per year. Additionally, 957.42 m^3 of TC organic mixed radioactive debris is being stored awaiting treatment. Therefore EPA does not believe there is sufficient treatment capacity for the TC organic mixed radioactive debris generated annually.

2. Current Management Practices

Waste generators and TSDFs report that most of the soils contaminated with D018–D043 newly identified organic TC wastes are currently landfilled without prior treatment. Incineration is the commercial off-site treatment technology reportedly available for these wastes.

Other than incineration for treating organic TC-contaminated soil, EPA has no information on the commercial off-site availability of other treatment technologies (e.g., low temperature thermal desorption, bioremediation, solvent extraction.) Although several commenters to the ANPRM mentioned bioremediation as an alternative to incineration for the treatment of TC-contaminated soils, no commenter provided facility specific information on commercially available off-site treatment capacity for bioremediation. The lack of off-site commercial capacity for technologies other than incineration was confirmed by responses to EPA's request for voluntary information from vendors of innovative technologies provided in the Vendor Information System for Innovative Treatment Technologies (VISITT). Although EPA has received no information that special-handling problems may limit the quantity of hazardous soil that currently can be treated by incineration, EPA is requesting information on special-handling concerns with managing these wastes.

3. Available Capacity and Capacity Implications

a. Hazardous soil. EPA is proposing that hazardous soil be treated prior to land disposal using one or more of the following general methods of soil treatment: Biological treatment, chemical extraction, soil washing, dechlorination, low-temperature thermal desorption, high-temperature distillation, thermal destruction, stabilization, and vitrification. EPA has determined that available destruction (e.g., incineration) capacity is inadequate, although adequate immobilization (e.g., stabilization) capacity exists. Inadequate capacity also exists for many of the proposed technologies in the extraction family (e.g., soil washing, chemical extraction). Much of the capacity of extraction technologies currently used to decontaminate soils, such as soil washing, may not be permitted prior to the effective date of this rule, although EPA is exploring options to expedite the permitting of these technologies. In conclusion, EPA anticipates that the off-site commercial capacity available to treat hazardous soils at the time this rule becomes effective will be limited to incineration and stabilization. EPA recognizes that innovative technologies are also available to treat hazardous soil. EPA requests comments on the practicality and current availability of these technologies.

EPA is proposing to grant a two-year national capacity variance for soils contaminated with newly identified TC organic wastes (D018–D043) and K141–K145, K147, K148, K149, K150, and K151 wastes. The variance is necessary because of the general lack of capacity to treat soil contaminated with organics, and the large quantity of soil contaminated with previously regulated organic wastes, for which the variances have expired. EPA is also proposing to grant a two-year national capacity variance to soils contaminated with newly listed wastes covered in the Phase I rule (i.e., F037 and F038 petroleum refining wastes; U328, U352, and U359; K107–K110; K111 and K112; K117, K118, and K136; and K123–K136.) The quantities of soil contaminated with F037 and F038 generated as a result of surface impoundment closures are estimated to be approximately 90,000 tons. EPA expects the quantities of soil contaminated with other Phase I wastes to be relatively small.

As discussed above, EPA estimates that as much as 3 million tons of hazardous soil contaminated with previously regulated wastes are land disposed per year. Any newly proposed commercial capacity will be needed for soil that is contaminated with wastes regulated in previous LDR rulemakings. The proposed variance may allow sufficient time for the installation and permitting of the treatment systems necessary to handle the quantities of soils contaminated with newly listed wastes covered in the Phase I rule.

The Agency's qualitative argument is based on this need and the lack of solid incineration as well as other capacity for managing hazardous soils. The Agency solicits comments on this approach and on estimates of available treatment capacity.

b. Hazardous debris. EPA estimates that approximately 34,000 tons of debris contaminated with newly identified organic TC wastes are currently land disposed and require off-site commercial treatment capacity. The capacity analysis conducted for debris contaminated with Phase II wastes indicates that insufficient capacity exists to treat debris contaminated with organics.

EPA is proposing to grant a two-year capacity variance for debris contaminated with newly listed and identified wastes covered under this proposal (i.e., newly identified organic TC wastes (D018–D043), K141–K145, and K147–K151 wastes.) The Agency is concerned that there will be insufficient time for facilities generating these debris and for potential treaters to plan for the management of such debris after the expiration of the one-year renewal of the hazardous debris case-by-case capacity variance in May 1994. EPA also realizes that there may be logistical problems associated with the management of hazardous debris cogenerated with hazardous soils contaminated with wastes covered in this proposal. In examining the generation of hazardous debris, EPA has learned that debris and soil are usually cogenerated; therefore, EPA is proposing to grant a two-year national capacity variance to debris contaminated with wastes covered by this proposal. EPA requests comments on this approach.

EPA notes that if soil and debris are contaminated with newly identified organic wastes covered in this rule and also with newly identified inorganic wastes whose treatment standard is based on an available technology, the soil and debris would remain eligible for the national capacity variance. This is because the hazardous soil and debris would still have to be treated by some technologies that EPA has evaluated as being unavailable at present.

XIII. State Authority

A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. Following authorization, EPA retains enforcement authority under sections 3008, 3013, and 7003 of RCRA, although authorized States have primary enforcement responsibility. The standards and requirements for authorization are found in 40 CFR part 271.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final authorization administered its hazardous waste program in lieu of EPA administering the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities that the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obliged to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under RCRA section 3006(g) (42 U.S.C. 6926(g)), new requirements and prohibitions imposed by HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out these requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, HSWA is implemented Federally in authorized States in the interim.

Certain portions of today's rule are being proposed pursuant to sections 3004(d) through (k), and (m), of RCRA (42 U.S.C. 6924(d) through (k), and (m)). It is proposed that these be added to Table 1 in 40 CFR 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to HSWA and that take effect in all States, regardless of their authorization status. States may apply for either interim or final authorization for the HSWA provisions in Table 1, as discussed in the following section of this preamble. Table 2 in 40 CFR 271.1(j) is also proposed to be modified to indicate that this rule is a self-implementing provision of HSWA.

B. Effect on State Authorization

As noted above, EPA is today proposing a rule that in part, when final, will be implemented in authorized States until their programs are modified to adopt these rules and the modification is approved by EPA. Because the rule is proposed pursuant to HSWA, a State submitting a program modification may apply to receive either interim or final authorization under RCRA section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's. The procedures and schedule for State program modifications for either interim or final authorization are described in 40 CFR 271.21. It should be noted that HSWA interim authorization expired on January 1, 1993 (see 40 CFR 271.24(c)), although EPA is currently developing a rule which would extend this date.

Section 271.21(e)(2) requires that States that have final authorization must modify their programs to reflect Federal program changes and must subsequently submit the modification to EPA for approval. The deadline by which the State would have to modify its program to adopt these regulations is specified in section 271.21(e). Once EPA approves the modification, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs may already have requirements similar to those in today's proposed rule. These State regulations have not been assessed against the Federal regulations being proposed today to determine whether they meet the tests for authorization. Thus, a State is not authorized to implement these requirements in lieu of EPA until the State program modifications are approved. Of course, states with existing standards could continue to administer and enforce their standards as a matter of State law. In implementing the Federal program, EPA will work with States under agreements to minimize duplication of efforts. In many cases, EPA will be able to defer to the States in their efforts to implement their programs rather than take separate actions under Federal authority.

States that submit official applications for final authorization less than 12 months after the effective date of these regulations are not required to include standards equivalent to these regulations in their application. However, the State must modify its program by the deadline set forth in § 271.21(e). States that submit official applications for final authorization 12 months after the effective date of these regulations must include standards equivalent to these regulations in their application. The requirements a state must meet when submitting its final authorization application are set forth in 40 CFR 271.3.

The regulations being proposed today need not affect the State's Underground Injection Control (UIC) primacy status. A State currently authorized to administer the UIC program under the Safe Drinking Water Act (SDWA) could continue to do so without seeking authority to administer the amendments that will be promulgated at a future date. However, a State which wished to implement part 148 and receive authorization to grant exemptions from the land disposal restrictions would have to demonstrate that it had the requisite authority to administer sections 3004(f) and (g) of RCRA. The conditions under which such an authorization may take place are summarized below and are discussed in a July 15, 1985 final rule (50 FR 28728).

XIV. Regulatory Requirements

A. Regulatory Impact Analysis Pursuant to Executive Order 12291

Executive Order No. 12291 requires that a regulatory agency consider for each regulation the potential benefits as compared to the potential costs to society. To this end, for all major rules, a Regulatory Impact Analysis (RIA) must be conducted. An RIA consists in a quantification of the potential benefits, costs and economic impacts of a rule. A major rule is defined as a regulation estimated to result in: (1) An annual effect on the economy of $100 million or more; (2) A major increase in costs or prices for consumers, individuals, industries, Federal, State, and local government agencies, or geographic regions; or (3) Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

The Agency estimated the costs of today's proposed rule to determine if it is a "major" regulation as defined by the Executive Order. Today's rule is estimated to have total annual incremental costs of $330 million; therefore, today's proposed rule is considered a major rule. Because today's proposed rule is a major rule, the Agency has performed an Regulatory Impact Analysis, analyzing the benefits, costs, and economic impacts of today's proposed rule.

More detailed discussions of the methodology and results sections may be found in the background document, "Regulatory Impact Analysis of the Land Disposal Restrictions for the Phase 2 Newly Listed and Identified Wastes and Contaminated Soils," which has been placed in the docket for today's proposed rule.

1. Methodology Section

a. Cost methodology. In today's notice, the Agency is proposing treatment standards for newly identified wastes, consolidating waste stream LDR requirements into a "universal" set of LDR standards, as well as establishing standards for treatment of hazardous soil. The newly identified wastes covered under today's rule include wastes displaying the organic toxicity

characteristic (TC), and pesticide wastes that were not previously hazardous by the EP leaching procedure (see section IV of today's preamble for TC organic and pesticide wastes), as well as Coke Production wastes and Chlorotoluenes (see section V of today's preamble.)

The Agency has not estimated the potential changes in compliance costs for the proposal to adopt the universal LDR requirements. In general, the Agency believes that many standards would not change significantly, and thus not significantly alter current compliance costs. However, the Agency requests comment on the economic impacts of the universal treatment standards proposal. Of the newly regulated hazardous soil in today's rule, the only newly identified wastes contaminating soil are TC wastes. There are some volumes of F037 and F038 listed waste which has been found to contaminate soils, however these volumes are only generated on a non-routine basis, and are believed to be negligible. The volumes of soils which are under existing LDR regulations will receive a potential relief from regulation as the Agency is reducing the treatment standards to which these soils must comply. Finally, the Agency is proposing some new testing and recordkeeping requirements, as well as reducing other recordkeeping requirements.

The cost analysis seeks to estimate the incremental costs which will be incurred as a result of the proposed requirements. The incremental costs are estimated as the costs incurred for management under the post-regulatory requirements minus the costs currently incurred under the baseline practices of management. All dollar estimates are in 1992 dollars (unless otherwise noted.) The potential cost savings estimated for previously regulated hazardous soils has not been subtracted out of the incurred costs to obtain a total, but are presented as a separate cost savings estimate.

The effects of waste minimization have not been thoroughly accounted for in the Phase II RIA. There are two areas of concern.

The first issue is how to account for waste minimization in the future, due to the Phase II rule. To comply with LDR requirements, generators will choose the least costly means to comply: Either pay for treatment and subtitle C disposal costs, or reduce their waste volumes. EPA has not considered waste minimization as a low cost compliance approach in the RIA. To the degree that waste minimization will be employed to comply with the Phase II rule, the costs of the rule would be lower than are estimated in the RIA. However, the costs of the waste minimization activities would then be a part of the compliance costs of this rule.

The second question is how much of the waste minimization indicated in the 1992 TC Census is attributable to the TC Rule and how much is attributable to the Phase II proposed rule. The volumes assigned to waste minimization in the 1992 TC Census database have been removed from those volumes for which compliance costs were estimated in the Phase II RIA. If these waste minimization plans were in anticipation of the TC and the Phase II rule, then at least a portion of the costs for these waste minimization activities should be included in the costs for the rule. If these plans were due to the TC rule, then the costs of the TC rule may have been overestimated, and there would be not waste minimization costs incurred to the Phase II rule.

These waste minimization timing and accounting issues are difficult to evaluate given the data and understanding of facilities compliance practices which currently exist. The uncertainty noted, the EPA requests comment on ways to account for these costs in this rule and in future rulemakings.

i. Organic toxicity characteristic wastes (D018–D043). The treatment standards for the organic TC wastes require the regulation of all underlying hazardous constituents. The TC wastes covered in this analysis can be divided into three groups: TC nonwastewaters, TC soils and TC debris; while TC wastewaters are being regulated in today's rule, EPA believes any affected volumes to be negligible. EPA relied on existing unit costs which have been used in past regulatory analyses to perform the cost analysis of today's rule. EPA describes below the method of estimating the costs incurred in complying with the TC standards proposed in today's notice.

The volumes employed for the TC wastes, taken from the 1992 TC Census Database, differ from those in the capacity section. For the purposes of developing the cost estimates for today's rule, EPA used a different accounting of the reduction in volume due to waste minimization plans, which plans were indicated in the TC Census. This accounting approach used for the cost estimation allowed more waste minimization plans to be included in the long term volumes requiring treatment under today's rule. Approximately 90% of the TC nonwastewaters are estimated to require thermal treatment, either incineration or thermal desorption. The unit cost estimates range from $1850 per ton for off-site incineration, to $213 per ton for on-site thermal desorption.

Organic Toxicity Characteristic Nonwastewaters (D018–D043)

EPA employed the 1992 TC Census Database for the analysis of the TC nonwastewater volumes under regulation in today's proposed rule. As there is no proposed variance for these wastes, the Agency determined costs on an annual basis from the proposal date of the rule.

In establishing a baseline for the TC nonwastewaters, the Agency assumed subtitle C landfilling on-site, for noncommercial (company captive) facilities, and off-site, for commercial facilities. For the post-regulatory case, EPA developed technology assignments for the wastestreams at each facility based on the standards being established in today's rule.

Organic Toxicity Characteristic Hazardous Soil

EPA employed the 1992 TC Census Database, for the cost analysis of the TC hazardous soil volumes under regulation in today's proposed rule. The Agency applied an adjustment factor from the "Regulatory Impact Analysis for the Final Rulemaking on Corrective Action Management Units and Temporary Units" (January 11, 1993, CAMU RIA) to soil volumes from remediation to account for the effects of the CAMU rule on these volumes. In addition, the Agency is proposing a two year national capacity variance for these soils, therefore, costs incurred from these requirements do not begin until two years after the proposal date of the rule.

In establishing a baseline for the TC hazardous soils the Agency assumed subtitle C landfilling on-site, for noncommercial (company captive) facilities, and off-site, for commercial facilities. The Agency presents three options for the post-regulatory case in today's rule: (a) Universal Standards 10, (b) Universal Standards 10, with 90% Removal, and (c) 90% Removal (taking comment on a possible cap for option (c).) EPA modeled the costs for the soil standards under two approaches: Options (a) and (b) as roughly equivalent options, and (c) separately. For each approach, the Agency developed technology assignments for the soils at each facility based on the standards being established in today's rule. In all three options, EPA assumed that thermal desorption and soil vapor extraction (SVE) would be used approximately 90% at a cost between $515 to $213 per ton. The assignments include a treatment technology

residuals management, subsequent disposal, and transportation as needed. The Agency requests comment on the methodology and unit cost estimate.

Organic Toxicity Characteristic Hazardous Debris

EPA employed the 1992 TC Census Database, for the cost analysis of the TC hazardous debris volumes under regulation in today's proposed rule. As for the TC soil, the Agency applied an adjustment factor from the CAMU RIA to debris volumes from remediation, as was done for the soils volumes, to account for the effects of the CAMU rule on these volumes. The CAMU rule is expected to reduce volumes by approximately 54%. In addition, the Agency is proposing a two year national capacity variance for TC debris, therefore, costs incurred from these requirements do not begin until two years after the proposal date of the rule.

In establishing a baseline for the TC hazardous debris the Agency assumed subtitle C landfilling on-site, for noncommercial (company captive) facilities, and off-site, for commercial facilities. For the post-regulatory case, EPA developed technology assignments for the wastestreams at each facility based on the standards being established in today's rule. The assignments include a treatment technology (treatment train where required), subsequent disposal, and transportation as needed.

ii. Remaining wastes. In addition to organic TC wastes, the wastes affected by today's proposed rule include coke by-product wastes and chlorotoluenes. Based on an economic analysis of coke by-product waste management, EPA assumes that generators of these wastes will, for the most part, be recycling these wastes rather than disposing of them in subtitle C landfills. Therefore, EPA estimates that negligible coke by-product wastes will be affected by this rule. For the chlorotoluene waste volumes, EPA conducted a detailed cost analysis using site specific data.

iii. Previously regulated hazardous soil. The hazardous soil regulated under today's rule can be broken into two groups: Hazardous soil which is under existing regulations, and newly regulated hazardous soil. The newly regulated hazardous soil is contaminated with TC wastes, and were described above. The previously regulated hazardous soil represents soil contaminated with listed or Extraction Potential Leaching Procedure (EP) toxicity wastes. Treatment standards were placed on these soils during the scheduled waste rules (First Third LDR, Second Third LDR, etc.) These soils, having existing standards established for their treatment, are being placed under new proposed standards, which are specifically developed for soil treatment. To the degree that these standards are less stringent, there will be an incremental cost savings calculated for the impact from today's rule.

The Agency estimated a volume of previously regulated soil of 2.1 million tons per year which would incur costs under today's rule. This estimate is derived from the capacity analysis work performed for today's rule, applying an adjustment factor to account for a reduction in the volumes being treated due to the recently promulgated CAMU rule. As the Agency is unable to grant a national capacity variance for previously regulated soils, the costs savings is assumed incurred from the date of proposal of today's rule.

The standards being established in today's rule for previously regulated soil are the same three as those being established for newly regulated soil (i.e.: TC soil): (a) Universal Standards x 10, (b) Universal Standards x 10, with 90% Removal, and (c) 90% Removal (comment is taken on a possible cap for this option). The Agency did not have facility specific data to develop a post-regulatory scenario for these volumes. Therefore, for the baseline and post-regulatory alternatives, EPA used professional judgment in interpreting the available data to estimate percentages of treatment for the post-regulatory scenario. To determine these percentages of treatment, the Agency compared existing soil concentration data (1991) from the CERCLA Record of Decision (ROD) database with the universal treatment standards. From these data, the Agency was able to determine baseline and post-regulatory technology percentages for the soil volumes.

iv. Testing and recordkeeping costs. In addition to the costs for treatment of wastes, EPA estimated the incremental costs for the new testing and recordkeeping requirements in today's rule. Testing and recordkeeping costs were developed for organic TC wastes only, using the facility specific data available for these wastes in the 1992 TC Survey.

The Agency employed baseline and post-regulatory scenarios appropriate to the testing requirements for each waste to develop cost estimates for the testing requirements in the rule. The Agency made several assumptions as to how frequent a generator would need to test their wastes, and for how many constituents to test. The "Regulatory Impact Analysis of the Land Disposal Restrictions for the Phase 2 Newly Listed and Identified Wastes and Contaminated Soils," which has been placed in the docket for today's rule, presents these approaches in full.

The Information Collection Request (ICR) for today's rule, being prepared by EPA, estimates that the recordkeeping cost is $41 per wastestream. For the requirements in today's rule, it is estimated to take one hour to develop and submit the required notification and one quarter of an hour to retain copies of the documentation and notification. The Agency requests comment on this estimate.

b. Economic impact methodology. The economic effects of today's proposed rule are defined as the difference between the projections of the likely economic impacts on facilities that result from regulatory compliance and the industrial activity likely in the absence of regulation (i.e., baseline conditions).

The Agency has evaluated the economic impacts for facilities managing organic TC wastes on a facility-specific basis, limited only by the extent that data were available. EPA estimated the economic effects by comparing incremental annual compliance costs to a number of company financial measures, such as revenues, cost of operations, operating income, and net income. Financial data were obtained from Standard & Poor's Corporation Descriptions for the last fiscal year reported.

Since EPA believes that no costs will be associated with the treatment standards for coke by-products in the proposed rule, no economic impacts will be associated with regulation of these wastes. Economic impacts of compliance for facilities currently land disposing chlorotoluenes were evaluated on a facility-specific basis.

c. Benefits methodology. The Agency evaluated three types of benefits for today's standards for newly identified TC wastes: reduction in human health risks via the ground-water pathway, reduction in human health risks via the air pathway, and positive effects on the value of properties adjacent to waste management facilities. EPA's analysis of the benefits of today's rule covers TC wastes only. These wastes dominate the other wastestreams covered by today's rule in terms of volume and costs. Moreover, the Agency had better data available for the TC wastes, in terms of attributes such as constituent concentrations and volumes which are required in an analysis of benefits. The Agency did not conduct a quantitative benefits estimate of the universal LDR proposal or the previously regulated soil

standards. EPA believes that these proposals could potentially greatly reduce compliance costs, with negligible change in protection of human health and the environment. However, the Agency requests comment on this finding. If commenters believe the Agency should perform a quantified estimate of the change in benefits of this proposal, commenters should suggest appropriate methods and approaches.

i. Human health risk reduction—ground water pathway. The fundamental concept underlying EPA's approach for assessing ground-water risk reduction is that subtitle C containment is completely effective in the short-term, i.e., over a period of about 30 years. However, the Agency assumes that over the longer term, containment systems and monitoring will fail. The benefits analysis performed for today's rule captures this long-term risk which could be avoided under today's rule. EPA analyzed the baseline risks, i.e., risks posed by TC wastes in the absence of today's rule, as well as post-regulatory risks under two options. In the baseline, TC wastes are untreated, shipped off-site, and placed in subtitle C landfills. In the post-regulatory scenario, TC wastes are treated and placed in subtitle D landfills. The difference in risks from the baseline to the post-regulatory condition is a measure of the benefit of an option.

The basic approach involves the following steps (which are elaborated on in the RIA background document, which has been placed in the docket for today's rule):

(1) The Agency employed waste concentration data from the 1992 TC survey to represent waste concentrations.

(2) Where surveys reported total waste concentrations, rather than TCLP concentrations, the Agency used the Organic Leaching Model (OLM) to estimate leachate concentrations.

(3) EPA calculated the mean concentration of each constituent at each facility, weighted across the volume of all TC wastes managed at that facility.

(4) EPA calculated the risk that would be posed by consumption of leachate, for both cancer and non-cancer effects, at each facility.

(5) EPA developed a set of dilution/attenuation factors (DAF) to represent the effect of fate and transport processes in a ground-water system. For each facility, the Agency divided the risk posed by the consumption of leachate by the DAF (expressed as a probability distribution) to yield predicted concentration at an exposure well.

(6) EPA then summed the 1800 predicted risks across all facilities (i.e., 36 facility leachate risks times 50 DAFs) to develop an estimate of the distribution of risk at facilities managing untreated TC wastes. The Agency summed the risks across the distribution to obtain a total population risk estimate. The Agency employed standard assumptions of a 70 kg person drinking 2 liters of water per day over 70 years.

(7) To simulate the regulatory options, the Agency reset the leachate concentrations in Steps 2 through 4 with the universal standard concentrations. EPA then replaced the DAF distribution for subtitle C facilities (from Step 5) with a DAF distribution for subtitle D facilities, because the treated TC residues will not need to be managed as hazardous wastes.

ii. Human health risk reduction—Air pathway. Constituents contained in TC waste, soil, and debris may be emitted to air through volatilization and dust entrainment. Reducing the concentrations of TC constituents through the treatment standards set in today's rule significantly reduces the potential for air emissions, and the risks posed by those air emissions. The goal of the air pathway risk analysis was to characterize baseline (pre-LDR) risk and the reduction in baseline risk resulting from regulatory options.

In the baseline, untreated TC wastes are placed in subtitle C landfills. In the post-regulatory scenario, treated wastes are placed in subtitle C or D landfills. In this analysis, EPA assumed that any air emissions due to additional transportation, storage or treatment in the post-regulatory scenario are negligible.

The Agency's basic approach involves the following steps (which are elaborated on in the RIA background document, which has been placed in the docket for today's rule):

(1) EPA used bulk waste concentration data from the TC survey to represent waste concentrations.

(2) In cases where respondents reported TCLP concentrations, rather than bulk concentrations, the Organic Leaching Model (OLM) was used to "back-calculate" bulk concentrations.

(3) The Agency calculated the mean concentration of each constituent at each facility, weighted across the volume of all TC wastes managed at that facility.

(4) EPA calculated the unit area managing TC wastes.

(5) EPA estimated annual average emissions due to volatilization and dust entrainment for each constituent at each facility.

(6) Using the same meteorologic conditions assumed for the Corrective Action RIA (CARIA),[7] atmospheric transport for each constituent was evaluated. EPA then calculate concentrations at several downwind points corresponding to potential exposure locations.

(7) The Agency calculated individual cancer risk and non-cancer risk, using exposure assumptions from the CARIA.

(8) EPA calculated population risk for exposed populations.

(9) The Agency simulated the regulatory options.

2. Results Section

a. Cost results. In total, today's proposed rule would have an incremental annual cost of $330 million. Seventy percent of this cost would be for the treatment of organic TC nonwastewaters, and 18 percent and 12 percent would be for the treatment of organic TC contaminated soil and debris, respectively. In a separate analysis, EPA estimates that the regulatory options proposed for all previously regulated contaminated soil could represent a potential annual savings of approximately $250 million to $560 million.

i. Organic TC wastes and other newly regulated wastes. As described above, EPA conducted a facility-specific cost analysis for those facilities managing organic TC waste.

Since EPA believes no coke by-product wastes will be landfilled as a result of the coke by-product listing rule (August 18, 1992, at 57 FR 37284), EPA estimates that no cost impact will be associated with the treatment standards for coke production wastes. The incremental cost for chlorinated toluenes is estimated to be less than $0.1 million annually.

ii. Previously regulated hazardous soil. As described above, EPA relied on available soil concentration data and professional judgment to determine the effect of the proposed rule on previously regulated hazardous soil. Exhibit XIV–1 presents the percentages estimated by EPA for the post-regulatory scenario for the previously regulated soil.

EXHIBIT XIV–1.—BREAKDOWN OF PERCENTAGES OF TREATMENT TECHNOLOGIES FOR THE PREVIOUSLY REGULATED SOILS POST-REGULATORY SCENARIO

	90 percent only	UTS only	UTS+90 percent
Incineration	0%–10%	5%–15%	5%–15%
Stabilization	10%	10%	10%
Soil Washing	80%	55%	70%
Thermal Desorption	10%–20%	15%–25%	15%–25%
Total	110%	95%	110%

—For the UTS Only option, the total sums to 95% because 15% of the soil requires no treatment at all under this option.
—Technology assignments assume a small amount of treatment trains are required.
—Soil washing is assigned as a low cost technology where minimum treatment is required.

Both the data and the methodologies used for the cost analysis have limitations. The main limitations are addressed in the background RIA document which has been placed in the docket for today's rule. The Agency has limited unit cost data for these treatment technologies. The Agency requests additional data and comment on the assumptions in this analysis.

b. Economic Impact Results. For non-commercial companies (company captives) in the TC capacity database, only one company would have a ratio of incremental compliance cost to cost of operations greater than one-half percent. Looking at the ratio of net income (i.e., after tax) to the incremental compliance cost, five companies would have a ratio less than 20; four of these five companies, however, reported a net loss in the last fiscal year. Of these five companies, only one would have a ratio of operating income to the incremental compliance cost less than 20.

For the commercial companies in the TC capacity database, only one has a ratio of incremental annual cost to cost of operations greater than five percent.

Since no costs are associated with the treatment standards for coke by-products, no economic impacts are expected. Economic impacts for facilities that generate chlorinated toluene wastes are calculated based on the before-tax annualized incremental costs. The results of the analysis, however, are aggregated since the data used in the analysis are propriety. Based on a ratio analysis of incremental cost to total sales, none of the facilities that generate these wastes is expected to experience significant impacts as a result of the proposed rule.

Both the data used for the economic impact analysis and the methodologies developed have limitations. The main limitations are addressed in the background RIA document which has been placed in the docket for today's rule.

c. Benefit Estimate—i. Results—Groundwater Pathway. This section presents results for the baseline risks and two regulatory approaches. For each case, results for individual cancer and non-cancer risk are presented for both high end and central tendency approaches. The section concludes with population risk estimates for cancer risks.

The results, presented in full in the RIA background document which is included in the docket for today's rule, show about eight percent of the population having an individual lifetime excess cancer risk above 10^{-6} in the high end baseline, and four percent between 10^{-6} and 10^{-4}, and approximately four percent above 10^{-4} in the high end baseline. For the central tendency baseline, the individual excess lifetime cancer risk is approximately six percent above 10^{-6}, five percent between 10^{-6} and 10^{-4}, and two percent above 10^{-4}. For both regulatory options, EPA assumed that all constituents would be directly (option 1) or indirectly (option 2) treated to universal standards. For the post-regulatory cases, about five percent of the population has an individual lifetime excess cancer risk level above 10^{-6}.

Using the distribution of individual risks, the Agency calculated baseline cancer population risk. EPA used data from the Corrective Action RIA on the proportion of subtitle C facilities with potentially exposed populations through ground water (23 percent), and the mean size of the potentially exposed population (6,870 people per facility). Using the facility/risk distribution of 1800 points (i.e., 36 facilities times 50 DAFs) the Agency multiplied the individual risk for a certain percentile of the distribution by the number of people represented by each percentile (i.e., 6,870 people per facility divided by the percentile represented by a single facility. A single facility represents 100 percent divided by 48 facilities, or 2.08 percent per facility. Therefore, there are about 3,300 people per percentile.) The population risks were then converted to annual values by assuming an average life span of 70 years. Based on these assumptions, EPA estimates the baseline population cancer risk to be 0.33 cases per year for the central tendency baseline. The post-regulatory population cancer risk is about 0.031 cases per year in the central tendency. In other words, the regulatory option reduces 0.30 cases per year in the central tendency.

An approach which would render the same result would be to compute the mean individual risk across the distribution and multiply it by the total number of people potentially exposed across all facilities (i.e., 6,870 people per facility times 48 facilities times 23 percent with down gradient wells equals 75,800 people).

The analysis shows that the 99th percentile baseline exposure level is less than the reference dose. Because the riskiest facility has an expected value for non-cancer exposure that is below the reference dose, the Agency is assuming no significant non-cancer risk in the baseline. Post-regulatory non-cancer risk is also insignificant for both regulatory options.

Assumptions for the second regulatory option produced cancer risks identical to those of the first option. For non-cancer risks, however, the two options produced somewhat different results.

ii. Results—Air Pathway. This section provides results for the air pathway, for the baseline and post-regulatory options. The Agency used two methods to calculate potential emissions. Method 1 for limiting mass flux from volatilization was never triggered; Method 2 limited emissions for 30 of the 141 constituent/facility combinations modeled for the baseline, which accounts for the difference between the baseline risks in the two approaches. For both post-regulatory options, the two methods produced virtually identical results.

Using Method 1, approximately 27 (75 percent) of the 36 facilities modeled have individual cancer risk exceeding

10^{-6} at the 140 m distance in the baseline, 16 facilities (45 percent) are between 10^{-6} and 10^{-4}, and 11 facilities (30 percent) have individual cancer risk exceeding 10^{-4} at the 140 m, with the peak value at 2 times 10^{-3}. In the post-regulatory scenario, the individual cancer risk is reduced so that approximately 5 facilities (15 percent) have individual cancer risk over 10^{-6}.

At the 600 m distance, using Method 1, approximately 18 facilities (50 percent) of the 36 facilities have individual cancer risk exceeding 10^{-6} in the baseline, 16 facilities (45 percent) are between 10^{-6} and 10^{-4}, and about 2 facilities (5 percent) have individual cancer risk exceeding 10^{-4}. In the post-regulatory scenario, the individual cancer risk is reduced so that no facilities have an individual cancer risk over 10^{-6}.

Using Method 2, approximately 27 facilities (75 percent) of the 36 facilities modeled have individual cancer risks exceeding 10^{-6} at the 140 m distance in the baseline, 22 facilities (60 percent are between 10^{-6} and 10^{-4}, and 5 facilities (15 percent) have individual cancer risk exceeding 10^{-4} at the 140 m, with the peak value at 2 times 10^{-4}. In the post-regulatory scenario, the individual cancer risk is reduced so that approximately 5 facilities (15 percent) have individual cancer risk over 10^{-6}.

At the 600 m distance, using Method 2, approximately 14 facilities (40 percent) have individual cancer risks exceeding 10^{-6}, and no facilities have individual cancer risk exceeding 10^{-4}, with the peak value at 2 times 10^{-5}. In the post-regulatory scenario, the individual cancer risk is reduced so that approximately no facilities have individual cancer risk over 10^{-6}.

Using both sets of emission rates, non-cancer dose exceeds the reference dose at only one facility; this occurs at both distances with Method 1, and only at 140 m using Method 2. For the post-regulatory scenario, for both options, the highest individual risk is six times 10^{-6}. Doses of all non-carcinogens are well below reference doses under both options.

For the population risk estimates, the Agency determined that the central tendency incremental benefits are 0.033 (Method 1) and 0.0065 (Method 2).

3. Regulatory Impact Analysis—Underground Injected Wastes

The Agency has completed a separate regulatory impact analysis for underground injected wastes affected by the Phase II proposed rule.

This analysis describes and evaluates the regulatory impacts only to the Class I injection well universe. The Agency does not believe that many Class V injection well owners and operators will be affected by the proposed Phase II requirements. The Agency believes that the new proposed Phase II LDRs for injected wastes cover either listed wastes or distinctly industrial wastes that would be injected by owners and operators of only Class I injection wells. EPA has no data which definitively indicates that any volumes of Phase II wastes are being injected in Class V wells, but reiterates that we are soliciting any and all comments and information which will affect the regulatory impact analysis.

According to the available data, the RIA indicates that up to 43 Class I injection facilities will be potentially affected by the new Phase II Land Ban requirements. These Class I injection facilities will now be required to either treat wastes, or file "no migration" petitions as outlined in 40 part CFR 148 (See 53 FR 28118 preamble for a more thorough discussion of the no migration petition review process). Up to 21 formerly non-hazardous Class I facilities may become newly hazardous due to the additional restrictions, whereas 22 facilities already have no migration exemptions approved by EPA, but may face additional requirements requiring some modification of their petitions due to the proposed Phase II rule.

The additional facilities affected by Phase II rulemaking contributes to overall compliance costs already incurred by Class I injection well owners and operators managing hazardous wastes regulated by previous rulemaking. The Agency analyzed costs and benefits for today's rule by using the same approach and methodology developed in the Regulatory Impact Analysis of the Underground Injection Control Program: Proposed Hazardous Waste Disposal Injection Restrictions used for the July 26, 1988, final rule (53 FR 28118) and subsequent rulemaking. An analysis was performed to assess the economic effect of associated compliance costs for the additional volumes of injected wastes attributable to this proposed rule.

In general, Class I injection facilities affected by the Phase II rule will have several options. Some facilities will modify existing no migration petitions already approved by the Agency, other facilities may submit entirely new petitions, and still others may accept the prohibitions and either continue to inject wastes after treatment or cease injection operations all together.

The total annual no migration petition costs for facilities affected by the new Phase II prohibitions is estimated to be $858,000. The annual cost for affected facilities employing alternative treatment is estimated to range from $3.9 million to $58 million annually. The range of costs for alternative treatment is the result of applying a sensitivity analysis. Only the incremental treatment costs for the new waste listings are calculated in this RIA.

The total cost to industry of petitions and alternative treatment arising from the proposed Phase II revisions for deep well injection is estimated to range from $4.8 million to $58.9 million annually. All of these costs will be incurred by Class I injection well owners and operators.

The Agency did not perform a quantified risk assessment for this proposal. However, the benefits to human health and the environment in the RIA are generally defined as reduced human health risk resulting from fewer instances of ground water contamination. In general, potential health risks from Class I injection wells are extremely low. However, injection is not without risks. In isolated cases, potential risks to human health and the environment may be greater due to abandoned, unplugged wells near the injection well site. Other cases involve possible grout seal failure around the protective casing of an injection well, but cancer risks from such a failure are insignificant. Of studies conducted to describe Class I well problems, only six wells, or less than two percent of all Class I wells, were reported to have experienced malfunctions that contributed to any contamination of the surface or of an underground source of drinking water. No health-related problems attributed to Class I injection were reported in the same study.

The economic analysis estimates that none of the twenty-six publicly traded companies affected by the rule will be significantly economically impacted. The limited data available for the 17 privately held companies suggests, however, that they may face significant impacts. Overall, the RIA assumes that none of the companies affected will close as a result of the proposed Phase II rule.

B. Regulatory Flexibility Analysis

Pursuant to the Regulatory Flexibility Act of 1980, 5 U.S.C. 601 *et seq.*, when an agency publishes a notice of rulemaking, for a rule that will have a significant effect on a substantial number of small entities, the agency must prepare and make available for public comment a regulatory flexibility analysis that considers the effect of the rule on small entities (i.e.: Small businesses, small organizations, and small governmental jurisdictions).

Under the Agency's Revised Guidelines for Implementing the Regulatory Flexibility Act, dated May 4, 1992, the Agency committed to considering regulatory alternatives in rulemakings when there were any economic impacts estimated on any small entities. Previous guidance required regulatory alternatives to be examined only when significant economic effects were estimated on a substantial number of small entities.

In assessing the regulatory approach for dealing with small entities in today's rule, for both surface disposal of wastes and underground injection control, the Agency considered two factors. First, data on potentially affected small entities are unavailable. And second, due to the statutory requirements of the RCRA LDR program, no legal avenues exist for the Agency to provide relief from the LDR's for small entities. The only relief available for small entities is the existing small quantity generators and conditionally exempt small quantity generator exemptions found in 40 CFR 262.11–12, and 261.5, respectively. These exemptions basically prescribe 100 kilograms (kg) per calendar month generation of hazardous waste as the limit below which one is exempted from complying with the RCRA standards.

Given these two factors, the Agency was unable to frame a series of small entity options from which to select the lowest cost approach; rather, the Agency was legally bound to regulate the land disposal of the hazardous wastes covered in today's rule without regard to the size of the entity being regulated.

C. Paperwork Reduction Act

The information collection requirements in today's proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1442.06) and a copy may be obtained from Sandy Farmer, Information Policy Branch (PM–223Y); U.S. Environmental Protection Agency; 401 M St., SW.; Washington, DC 20406 or by calling (202) 260–2740.

The annual public reporting burden for this collection of information is estimated to average 2 hours per treatment facility and 1 to 52 hours per generator, including time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. The annual recordkeeping burden for generators and treatment facilities is estimated to be 15 minutes per respondent.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch (PM–223Y); U.S. Environmental Protection Agency; 401 M St., SW.; Washington, DC 20406; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington DC 20503, marked "Attention: Desk Officer for EPA." The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

List of Subjects

40 CFR Part 148

Administrative practice and procedure, Hazardous waste, Reporting and recordkeeping requirements, Water supply

40 CFR Part 260

Administrative practice and procedure, Hazardous waste.

40 CFR Part 261

Hazardous waste, Recycling, Reporting and recordkeeping requirements.

40 CFR Part 268

Hazardous waste, Reporting and recordkeeping requirements.

40 CFR Part 271

Administrative practice and procedure, Hazardous materials transportation, Hazardous waste, Penalties, Reporting and recordkeeping requirements.

Dated: August 31, 1993.

Carol M. Browner,

Administrator.

Appendix A to the Preamble: Description of Hazardous Soil Treatment Technologies and Performance Standards

1. *Biological Treatment*

Biological treatment is a destruction technology that uses microorganisms to degrade and transform hazardous organic compounds into compounds of reduced toxicity. Bacteria, fungi, and yeasts are the microorganisms most frequently employed for biodegradation of hazardous compounds. Under aerobic conditions (in the presence of oxygen), microorganisms biodegrade organic contaminants to carbon dioxide, water, nitrate, sulfate, and cell protein. Under anaerobic conditions (in the absence of oxygen), microorganisms can biodegrade organic contaminants into methane, carbon dioxide, and cell protein.

Aerobic bioslurry treatment involves mixing contaminated material with water to form a slurry in an enclosed container. Nutrients and oxygen are added to the water to provide microorganisms with the proper environment to facilitate biodegradation, and the slurry is mixed to keep the solids in suspension. Bioslurry treatment has the advantage of providing for careful process control, and increased contact between microorganisms and contaminants in the slurry.

Aerobic biological treatment may also be conducted in the solid-phase. Solid-phase treatment activities include composting and prepared bed treatment. Optimized conditions for solid-phase treatment are maintained by tilling the soil regularly for aeration and contaminant mixing, addition of required nutrients for microbial metabolism, and supplemental irrigation for moisture control.

Anaerobic biological treatment may be conducted in either a solid- or a slurry-phase, using equipment similar to that used for aerobic treatment. Anaerobic treatment typically requires more time than aerobic treatment, due to the slow growth rate of the methanogenic (methane producing) bacteria. Anaerobic treatment is most effective on soils with a moderate to high Ph, containing contaminants that are nonhalogenated hydrocarbons, and soils with low biochemical oxygen demand.

2. *Chemical Extraction*

Extraction technologies are used to treat wastes containing a variety of organic constituents and a broad range of total organic content. This method of treatment is accomplished using an organic solvent in the liquid phase to solubilize contaminants for removal and can be used on many solvent-soluble contaminants. The effectiveness of this technology depends on the solvent-contaminant match. Two general extraction technologies are leaching and immersion extraction.

In its most typical form, leaching is a batch extraction operation in which an organic solvent is sprayed onto soil in a tank, causing the contaminant to leach from the soil. The solvent, containing the contaminant(s), is collected at the bottom of the tank after percolating through the soil. In the absence of agitation, the liquid-solid extraction is a slow and inefficient process. Channeling of the liquid solvent through the soil can result in untreated

portions of soil in the tank, further lowering the efficiency. Further, the presence of fines can stop the percolation process while the presence of coarse agglomerates with well-imbedded contaminants often can only be treated at the surface.

In immersion extraction, soil is suspended and thoroughly mixed in solvent baths operated at elevated or ambient temperatures to optimize treatment. Secondary treatment (e.g., distillation) is performed to separate the solvent from the contaminant. After treatment, it is sometimes possible to reuse the solvent in the treatment system.

A wide variety of organic solvents are commonly used, depending on the soil contaminant being treated. The choice of suitable solvent depends primarily on chemical structures of the contaminant, solubility of contaminants in the solvent, soil type, and equilibrium characteristics. Chemical extraction treatment systems rely on differences between the boiling points of the contaminant and the solvent to facilitate post-treatment separation (distillation).

A primary advantage of chemical extraction is the wide range of applicability for treating hazardous soil. If the proper solvent is selected, treatment of many soil contaminants is possible. Typical treatment times can range from several hours to several days.

3. *Dechlorination*

Dechlorination is a soil treatment process whereby contaminants in the soil are chemically reacted to form less toxic compounds. The soil is mixed with a chemical reagent and agitated to increase the contact of reagent with the soil contaminant. The reaction that takes place in the soil is a substitution reaction, in which chlorine is removed from the contaminant and substituted with a less toxic element (usually hydrogen). The contaminant and residual reagents that remain in the soil following the substitution reaction can be removed in a subsequent step using an extraction process.

Another type of dechlorination treatment technology that is available (although not commonly used) to dechlorinate chlorinated organic compounds in soil is photochemical degradation. This type of treatment technology uses photochemical energy in the form of ultraviolet (UV) radiation, usually artificial, to degrade halogenated contaminants such as polychlorinated biphenyls (PCBs), and polychlorinated dibenzodioxins (PCDDs), and polychlorinated dibenzofurans (PCDFs). These compounds are quite reactive in the presence of UV radiation. The photoreduction mechanism involves the substitution of hydrogen for chlorine, leading to the formation of detoxified substances.

4. *High-Temperature Metals Recovery*

High temperature metals recovery (HTMR) is a technology applicable to materials containing substantive amounts of metal oxides and metal salts (including cadmium, chromium, lead, nickel, and zinc compounds) at concentrations ranging up to 70 percent with low levels (i.e., below 5 percent) of organics and water in the wastes. There are a number of different types of HTMR systems, which generally differ from one another in source of energy used and the method of recovery. These HTMR systems include the rotary kiln process, the plasma arc reactor, the rotary hearth electric furnace system, the molten slag reactor, and the flame reactor.

The basic principle of operation for HTMR is that metal oxides and salts are separated from a waste through a high temperature thermal reduction process that uses carbon, limestone, and silica as raw materials. The carbon acts as a reducing agent and reacts with metal oxides to generate carbon dioxide and free metal. The silica and limestone serve as fluxing agents. This process yields a metal product for reuse and reduces the concentration of metals in the residuals. The HTMR process consists of a mixing unit, a high temperature processing unit (kiln, furnace, etc.), a product collection system, and a residual treatment system.

5. *Soil Washing*

Soil washing is used to describe a number of techniques where contaminants are either separated or removed from soil with an aqueous process. Soil washing has the potential to be applicable to many different types of contamination, including both organic and metallic contaminants.

In soil washing, soil is mixed with water and the resulting solution is augmented with a basic or surfactant agent that increases the solubility of the contaminant(s) in water. This is usually done to remove organics. Soil washing may be done with an acidic solution or a chelating agent that chemically reacts with metal ions and promotes their solubility.

6. *Solidification/Stabilization*

Solidification/stabilization is used to convert soil into a matrix that prevents contaminants from leaching. Stabilization techniques are most commonly used for hazardous wastes with treatment standards expressed as a concentration of constituents in an extract of the waste. (Stabilization of wastes (or hazardous soil) that have treatment standards expressed solely as specific concentrations of constituents in the entire waste stream is not appropriate.)

Three types of solidification/stabilization processes are used for treatment of soil. The first involves mixing the soil with cement, lime, fly ash, kiln dust, silicates, or other pozzolanic-type materials, and water; the mixture then goes through a curing process. The second process involves mixing the soil with asphalt and/or plastic. In this process, the mixture is heated to slightly above the melting point of the plastic or asphalt, which causes the soil to be covered with a polymeric or asphalt coating. The mixture is then cooled and allowed to cure prior to disposal. The third type of solidification/stabilization technologies use proprietary additives. These processes are fixation technologies that involve the addition of chemicals (reagents) to the contaminated matrix changing the form of the contaminant so that it is no longer soluble in water. Solidification/stabilization processes increase the volume of treated material, but leave no additional residuals.

To obtain a uniform stabilized material, the particle size of the soil being stabilized should be kept fairly small. Vendors of various solidification/stabilization processes have different size requirements, but the particular sizes generally range in diameter from 6.35 to 100 mm. Sizing equipment, such as ball mills or hammer mills, is commercially available to size most soil particles to meet the requirements for microencapsulation processes. Currently, shredding equipment may be used to process debris-like materials such as large stones or rocks that may be found in the soil.

7. *Thermal Desorption*

Thermal desorption systems employ either a direct or an indirectly-fired oven or heating chamber to volatilize organic contaminants. Usually soil is placed into the system and heated by convection using heating fuel or an electric heating element, or heated by radiation using infrared radiation or microwaves. For continuous operations, screw augers or rotary kilns are used to mix the soil while moving the hazardous soil through the system. To transfer heat to the soil in an auger system, a heating fluid is passed through the center of the auger. Heat transferred to the soil volatilizes the contaminants from the soil. Treatment

systems have an oxygen deficient atmosphere in order to prevent contaminants and soil from combusting or exploding. Volatilized contaminants can be separated from the gaseous effluent by scrubbing or absorption, or it may be incinerated. Thermal desorption systems can be designed to be run in either a batch or continuous mode.

8. *Thermal Destruction*

Thermal destruction includes treatment in an incinerator operated in accordance with the technical operating requirements of 40 CFR part 264 subpart O and 40 CFR part 265 subpart O, in boilers or industrial furnaces operating under either interim status or a RCRA permit in accordance with the requirements of 40 CFR part 266, subpart H, or in other RCRA permitted thermal treatment devices, such as pyrolysis units operating under interim status in accordance with the requirements of 40 CFR part 265, subpart P.

Thermal destruction uses heat to cause contaminants to chemically react to form nonhazardous chemicals. Thermal destruction units may use either an oxidizing or a nonoxidizing atmosphere. Units in which an oxidizing atmosphere is employed cause combustible contaminants to oxidize to carbon dioxide and water. Units that employ a non-oxidizing atmosphere frequently employ a nitrogen atmosphere in the combustion chamber. In these units, contaminants are reacted to form carbon monoxide and methane gas.

Many incinerators require size-reduction of soil or soil agitation during incineration in order to ensure that all of the soil being treated reaches the operating temperature of the unit. Units can be run under a slightly negative pressure to prevent emissions of volatilized or incompletely combusted contaminants. Thermal destruction units must also employ emission control devices to prevent emissions of a variety of combustion products including particulate matter, oxides of sulfur and nitrogen (SO_X and NO_X), and products of incomplete combustion.

Treatment residuals from thermal destruction units include effluent gas, wastewater and sludges from air pollution scrubbers, and residual ash, which consists of the noncombustible portion of soil and contaminants.

9. *Vitrification*

This technology uses heat to transform wastes into a glass and crystalline mass. The heat causes soil to be broken down into its mineral components and oxides, which then do not reform upon cooling. At the high temperatures associated with vitrification, most inorganic constituents fuse and become chemically incorporated into the molten mass or simply become immobilized in the mass without chemically changing form. The exceptions include the more volatile heavy metals (e.g., Hg) which may not enter the molten liquid, but may be removed with the other off-gases. The organics are generally pyrolyzed or oxidized and come out of the process in the off-gases. Vitrification can be performed in a treatment reactor at temperatures of up to 2000°C. This treatment is effective for soil containing most RCRA hazardous constituents.

The temperatures required for vitrification (up to 2000°C) can be generated a number of ways. These include: Joule heating by passing an electric current through the waste; heating in an electric furnace; heating by introduction of a plasma torch to the waste reactor; and heating in an incinerator operating in a slagging mode. With each of these methods, the waste stream (and additives, if necessary) is heated until a molten liquid is formed. Additional wastes may be introduced to the molten mass and treated with the heat transferred from the liquid. The molten glass can be either quenched or allowed to cool more slowly. In either case, an obsidian-like glass is generated which can be in the form of a large monolith or any number of smaller sizes down to small granules. Off-gases from vitrification may require further treatment.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 148—HAZARDOUS WASTE INJECTION RESTRICTIONS

1. The authority citation for part 148 continues to read as follows:

Authority: Sec. 3004, Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.

2. Section 148.17 is amended by redesignating paragraphs (b) and (c) as (c) and (d) and by adding paragraph (b) to read as follows:

§ 148.17 Waste specific prohibitions—Newly Listed Wastes.

* * * * *

(b) Effective [Insert date three months from date of publication], the wastes specified in 40 CFR 261.24 as EPA Hazardous waste numbers D012, D013, D014, D015, D016, D017 that are Toxicity Characteristic toxic halogenated pesticide wastes, and the wastes specified in 40 CFR 261.32 as EPA Hazardous waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151, are prohibited from underground injection.

* * * * *

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

3. The authority citation for part 260 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921–6927, 6930, 6934, 6935, 6937, 6939, and 6974.

4. In § 260.30, the introductory text and paragraph (b) are revised to read as follows:

§ 260.30 Variances from classification as a solid waste.

In accordance with the standards and criteria in § 260.31 and the procedures in § 260.33, the Administrator may determine on a case-by-case basis that the following recycled materials are not solid wastes:

* * * * *

(b) Materials that are reclaimed and then reused within the original production process in which they were generated; and

* * * * *

5. In § 260.31, paragraph (a) introductory text, and paragraph (b) is revised to read as follows:

§ 260.31 Standards and criteria for variances from classification as a solid waste.

(a) The Administrator may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The Administrator's decision will be based on the following criteria:

* * * * *

(b) The Administrator may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(1) How economically viable the production process would be if it were

to use virgin materials, rather than reclaimed materials;

(2) The prevalence of the practice, on an industry-wide basis;

(3) The extent to which the material is handled before reclamation to minimize loss;

(4) The time periods between generating the material and its reclamation, and between reclamation and return to the original production process;

(5) The location of the reclamation operation in relation to the production process;

(6) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(7) Whether the person who generates the material also reclaims it;

(8) In cases where the original process to which the material is returned is a secondary process, the extent to which materials are managed before return in a protective manner such that there will be little potential for release of the material or its hazardous constituents to the environment (e.g., storage in tanks, containers, and indoors such as containment buildings); and

(9) Other relevant factors.

* * * * *

6. In § 260.32, the introductory text is revised to read as follows:

§ 260.32 Variance to be classified as a boiler.

In accordance with the standards and criteria in § 260.10 (definition of "boiler"), and the procedures in § 260.33, the Administrator may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in § 260.10, after considering the following criteria:

* * * * *

7. Section 260.33 is revised to read as follows:

§ 260.33 Procedures for variances from classification as a solid waste or to be classified as a boiler.

The Administrator will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed controlled flame combustion devices as boilers:

(a) The applicant must apply to the Administrator for the variance. The application must address the relevant criteria contained in § 260.31 or § 260.32.

(b) The Administrator will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement or radio broadcast in the locality where the recycler is located. The Administrator will accept comment on the tentative decision for 30 days, and may also hold a public hearing upon request or at his discretion. The Administrator will issue a final decision after receipt of comments and after the hearing (if any).

8. Section 260.42 is added to read as follows:

§ 260.42 Procedures for contained-in determinations for hazardous debris, hazardous soil and other environmental media.

(a) Any person may petition the Regional Administrator to exclude, under § 261.3(f)(2) or § 261.3(g) of this chapter, hazardous debris and hazardous soil or other environmental media, including but not limited to, ground water, surface water, and sediments, from regulation as hazardous waste. (Such a petition is not necessary for remedial actions conducted pursuant to RCRA or CERCLA authorities provided that a similar determination is made by the Regional Administrator based on information substantially equivalent to the information listed below including public notice and comment requirements.) The petition for a contained-in determination must include information sufficient to demonstrate that specific constituent concentrations in the hazardous debris, hazardous soil, or other environmental media to be excluded do not pose a hazard to human health and the environment at that site. Each petition must be submitted to the Regional Administrator and must include:

(1) The petitioner's name and address.

(2) An explanation, to the extent possible, of the circumstances by which the affected debris, soil, or other media became contaminated with hazardous wastes.

(3) Information on waste and site characteristics and conditions, to include at a minimum, the type of information listed in paragraph (c) of this section.

(4) After receiving a petition, the Regional Administrator may request additional information which may be required in making a determination.

(b) The Regional Administrator will make a tentative decision to grant or deny a petition for a contained-in determination after receipt of a complete petition, and will publish a newspaper notice of such tentative decision, and provide the opportunity for the petitioner and the public to submit written comments within 30 days of the publication of the notice. After consideration of the comments, the Regional Administrator will issue a final determination denying or approving the petition.

(c) The Regional Administrator will consider waste- and site-specific information in making such determinations. Such information may include, but is not limited to:

(1) Characteristics of the debris, soil, or other media;

(2) Waste constituent characteristics, such as solubility, mobility, toxicity, and interactive effects of constituents present in the contaminated debris, soil, or other media that may affect those properties;

(3) All possible exposure pathways, such as potential for direct human contact with the contaminated medium, and potential adverse ecological impacts;

(4) An "acceptable" risk range of 10^{-4} to 10^{-6};

(5) Surface and subsurface characteristics such as topography, hydraulic conductivity, permeability and porosity of soil, aquifer thickness, and other geologic and hydrogeologic characteristics that may influence constituent mobility and migration potential at the surface and in the unsaturated and saturated zones.

(6) Climatic conditions; and

(7) Other site or waste-specific characteristics or conditions that may affect the potential for constituents present in the contaminated medium to migrate and/or pose a hazard to human health or the environment.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

9. The authority citation for part 261 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, 6922, and 6938.

10. Section 261.2 is amended by revising paragraph (e)(1)(iii) to read as follows:

§ 261.2 Definition of solid waste.

* * * * *

(e) * * *

(1) * * *

(iii) Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials must be managed before return in a protective manner (e.g.,

storage in tanks, containers, and indoors such as containment buildings) such that there will be little potential for release of the material or its hazardous constituents to the environment.

* * * * *

11. Section 261.3 is amended by revising paragraph (f)(2) and adding paragraph (g) to read as follows:

§ 261.3 Definition of hazardous waste.

* * * * *

(f) * * *

(2) Debris as defined in part 266 of this chapter that the Regional Administrator determines under § 260.42 of this chapter is no longer contaminated with hazardous waste.

(g) Notwithstanding paragraphs (a) through (d) of this section, soil and other environmental media including, but not limited to, ground water, surface water, and sediments, that is contaminated or mixed with one or more wastes listed in subpart D of this part, or that exhibits a hazardous waste characteristic in subpart C of this part, are not subject to regulation under 40 CFR parts 260, 261 to 266, or 270 provided that:

(1) The Regional Administrator determines under § 260.42 of this chapter that the soil or other environmental media is no longer contaminated with hazardous waste; and

(2) The soil or other environmental media does not exhibit a hazardous waste characteristic in subpart C of this part.

12. In § 261.4, paragraph (a)(13) is added to read as follows:

§ 261.4 Exclusions.

(a) * * *

(13) Environmental media, including, but not limited to soils, ground water, surface water, and sediments, that exhibit a hazardous waste characteristic in subpart C of this part, or that is contaminated or mixed with one or more wastes listed in subpart D of this part, or with residuals derived from the treatment, storage, or disposal of a waste listed in subpart D of this part with constituent concentrations below those that are determined by the Regional Administrator to represent minimized threats to human health and the environment. Such determinations will be made in accordance with § 260.42 of this chapter.

* * * * *

PART 268—LAND DISPOSAL RESTRICTIONS

13. The authority citation for part 268 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), 6921, and 6924.

Subpart A—General

14. In § 268.1, paragraphs (c)(3)(ii), (e)(4) and (e)(5) are revised and paragraph (c)(3)(iii) is added to read as follows:

§ 268.1 Purpose, scope and applicability.

* * * * *

(c) * * *

(3) * * *

(ii) Do not exhibit any prohibited characteristic of hazardous waste at the point of injection; and

(iii) If the injected wastes are D001 High TOC subcategory wastes or D012–D017 pesticide wastes, they have been treated to meet the treatment standards of § 268.40 before the point of injection, or they are disposed in an approved no-migration injection well as demonstrated pursuant to § 148.20 of this chapter.

* * * * *

(e) * * *

(4) *De minimis* losses to wastewater treatment systems of commercial chemical product or chemical intermediates that are ignitable (D001), corrosive (D002), or are organic constituents that exhibit the characteristic of toxicity (D012–D043) and that contain underlying hazardous constituents as defined in § 268.2, are not considered to be prohibited wastes. *De minimis* is defined as losses from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges.

(5) Land disposal prohibitions do not apply to laboratory wastes displaying the characteristic of ignitability (D001), corrosivity (D002), or are organic constituents that exhibit the characteristic of toxicity (D012–D043), that are commingled with other plant wastewaters under designated circumstances: ignitable, corrosive, and TC organic laboratory wastes containing underlying hazardous constituents from laboratory operations, that are mixed with other plant wastewaters at facilities whose ultimate discharge is subject to regulation under the CWA (including wastewaters at facilities which have eliminated the discharge of wastewater), provided that the annualized flow of laboratory wastewater into the facility's headwork does not exceed one percent, or provided that the laboratory wastes' combined annualized average concentration does not exceed one part per million in the facility's headwork.

15. Section 268.2 is amended by redesignating paragraphs (i) as (j), (e) as (i), (h) as (e), (d) as (h), (b) as (d), (g) as (b), (c) as (g), (a) as (c) and (f) as (k) and by adding paragraphs (a) and (f) to read as follows:

§ 268.2 Definitions applicable in this part.

* * * * *

(a) Constituents subject to regulation means those constituents for which treatment standards are established in § 268.48 at levels above the universal treatment standards.

* * * * *

(f) Hazardous soil means soil that contains RCRA hazardous waste(s) listed in 40 CFR part 261, subpart D, or that exhibits one or more of the characteristics of a hazardous waste as defined in 40 CFR part 261, subpart C.

* * * * *

16. In § 268.7, paragraphs (a) introductory text, (a)(1)(ii), and (a)(8) are revised, paragraph (a)(9) is removed, paragraph (a)(10) is redesignated as paragraph (a)(9), paragraphs (a)(10) and (a)(11) are added, paragraphs (b)(4)(ii) and (d) introductory text are revised, and paragraph (e) is added to read as follows:

§ 268.7 Waste analysis and recordkeeping.

(a) Except as specified in § 268.32, if a generator's waste is listed in 40 CFR part 261, subpart D, the generator must test his waste, or test an extract using test method 1311, the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW 846 as incorporated by reference in § 260.11, or use knowledge of the waste, to determine if the waste is restricted from land disposal under this part. Except as specified in § 268.32, if a generator's waste exhibits one or more of the characteristics set out at 40 CFR part 261, subpart C, the generator must test an extract using test method 1311, the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW–846), or use knowledge of the waste, to determine if the waste is restricted from land disposal under this part. If the generator determines that his waste exhibits:

(1) The characteristic of ignitability (D001) (and is not in the High TOC Ignitable Liquids Subcategory or is not treated by INCIN, FSUBS, or RORGS of § 268.42, Table 1), or the characteristic

of corrosivity (D002), and is prohibited under § 268.37; and/or

(2) The characteristic of toxicity, and is prohibited under § 268.38, the generator must determine what underlying hazardous constituents (as defined in § 268.2), are reasonably expected to be present in the D001, D002, or TC waste.

* * * * *

(1) * * *

(ii) The waste constituents for wastes F001–F005, F039, wastes prohibited pursuant to § 268.32 or RCRA section 3004(d), and for underlying hazardous constituents (as defined in § 268.2), in D001 and D002 wastes if those wastes are prohibited under § 268.37, and constituents subject to treatment in TC wastes that are prohibited under § 268.38. Also included must be the applicable wastewater (as defined in § 268.2(f)) or nonwastewater (as defined in § 268.2(d)) form and the applicable subcategories made within a waste code based on waste-specific criteria (such as D003 reactive cyanides).

* * * * *

(8) If a generator is managing a lab pack that contains prohibited wastes, and does not include any wastes found at § 268.42(c)(2), and wishes to use the alternative treatment standard under § 268.42, with each shipment of waste the generator must submit a notice to the treatment facility in accordance with paragraph (a)(1) of this section. The generator must also comply with the requirements in paragraphs (a)(5) through (a)(7) of this section, and must submit the following certification, which must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack does not contain any waste found at § 268.42(c)(2). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

* * * * *

(10) If a generator determines that he is managing hazardous soil that does not meet the treatment standards established in § 268.47, then with each shipment of hazardous soil, the generator must notify the treatment or storage facility in writing of the constituents subject to treatment and the appropriate treatment standards as described in §§ 268.47. If the treatment standards specified on the notification indicate that 90% treatment of the initial concentrations of the constituents subject to treatment has been performed, the generator must maintain documentation, in the facility operating record, supporting the treatment standard by documenting the initial concentrations and the treated concentrations of constituents subject to treatment.

(11) If a generator determines that he is managing hazardous soil that is restricted under this part, and determines that the hazardous soil can be land disposed without further treatment, then, with each shipment of hazardous soil, the generator must certify and notify the treatment, storage, or land disposal facility in writing as described in paragraph (a)(2) of this section. To meet the requirements of paragraph (a)(2)(i)(B) of this section, the generator must specify the appropriate treatment standard for the hazardous soil. If the universal treatment standards are not specified as the appropriate treatment standards, the generator must maintain documentation, in their files, supporting the treatment standard specified to the treatment facility. In lieu of the certification in paragraph (a)(2)(ii) of this section, the following certification must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the hazardous soil through analysis and testing or through knowledge of the hazardous soil to support this certification that the waste complies with the regulations and requirements that apply to hazardous soil as specified in 40 CFR parts 260 through 268. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

* * * * *

(b) * * *

(4) * * *

(ii) The waste constituents for wastes F001–F005, F039, wastes prohibited pursuant to § 268.32 or RCRA section 3004(d), and for underlying hazardous constituents (as defined in § 268.2), in D001 and D002 wastes if those wastes are prohibited under § 268.37, and constituents subject to treatment in TC wastes that are prohibited under § 268.38. Also included must be the applicable wastewater (as defined in § 268.2(f)) or nonwastewater (as defined in § 268.2(d)) form and the applicable subcategories made within a waste code based on waste-specific criteria (such as D003 reactive cyanides).

* * * * *

(d) Generators or treaters who determine that hazardous debris is excluded from the definition of hazardous waste under § 261.3(f)(1) of this chapter (i.e., debris treated by an extraction or destruction technology provided by Table 1, § 268.45) are subject to the following notification and certification requirement:

* * * * *

(e) Generators or treaters who first claim that hazardous debris or hazardous media is excluded from the definition of hazardous waste under § 261.3(f)(2) or § 261.3(g) of this chapter, must place a one-time notice stating the applicable exclusion and the disposition of the waste in the facility's files, and must retain such notices for at least five years.

17. In § 268.9, paragraphs (a), (d)(1) introductory text, (d)(1)(i) and (d)(1)(ii) are revised and (d)(1)(iii) is removed to read as follows:

§ 268.9 Special rules regarding wastes that exhibit a characteristic.

(a) The initial generator of a solid waste must determine each EPA Hazardous Waste Number (waste code) applicable to the waste in order to determine the applicable treatment standards under subpart D of this part. For purposes of part 268, the waste will carry the waste code for any applicable listing under 40 CFR part 261, subpart D. In addition, the waste will carry one or more of the waste codes under 40 CFR part 261, subpart C, where the waste exhibits a characteristic, except in the case when the treatment standard for the waste code listed in 40 CFR part 261, subpart D operates in lieu of the standard for the waste code under 40 CFR part 261, subpart C, as specified in paragraph (b) of this section. If the generator determines that his waste displays the characteristic of ignitability (D001) (and is not in the High TOC Ignitable Liquids Subcategory or is not treated by INCIN, FSUBS, or RORGS of § 268.42, Table 1), or the characteristic of corrosivity (D002), and is prohibited under § 268.37; or if the generator determines that his waste displays the characteristic of toxicity (D011–D043), and is prohibited under § 268.38; or if the generator has characteristic hazardous soil prohibited under § 268.39, the generator must determine what underlying hazardous constituents (as defined in § 268.2), are reasonably expected to be present in the D001, D002, or TC waste.

* * * * *

(d) * * *

(1) The notification must include the following information:

(i) Name and address of the Subtitle D facility receiving the waste shipment; and

(ii) A description of the waste as initially generated, including the applicable EPA Hazardous Waste Number(s), treatability group(s), and

underlying hazardous constituents in D001, D002, TC wastes, or characteristic hazardous soil (if applicable).

* * * * *

Subpart C—Prohibitions on Land Disposal

18. In Subpart C, § 268.38 is added to read as follows:

§ 268.38 Waste specific prohibitions—newly listed and identified wastes.

(a) Effective [insert date 90 days from date of publication], the following wastes specified in 40 CFR 261.24, Table 1 as EPA Hazardous Waste numbers D012, D013, D014, D015, D016, D017, D018, and D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043 nonwastewaters; and the wastes specified in 40 CFR 261.32 as EPA Hazardous Waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal.

(b) Effective [insert date two years from date of publication], radioactive wastes that are mixed with D018–D043 nonwastewaters, D012–D017 wastes that pass the EP toxicity test but fail the TCLP test, K141–K145, and K147–K151 are prohibited from land disposal.

(c) Between [insert date of publication] and [insert date two years from date of publication], the wastes included in paragraph (c) of this section may be disposed of in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in § 268.5(h)(2).

(d) The requirements of paragraphs (a), (b), and (c) of this section do not apply if:

(1) The wastes meet the applicable standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under § 268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate standards established pursuant to a petition granted under § 268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to § 268.5, with respect to these wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in § 268.40, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable subpart D of this part levels, the waste is prohibited from land disposal, and all requirements of 40 CFR part 268 are applicable, except as otherwise specified.

19. Section 268.39 is added to read as follows:

§ 268.39 Waste specific prohibitions—Hazardous soil, and debris contaminated with certain newly listed wastes.

(a) Effective [insert date two years from date of publication], soils that are contaminated with F037, F038, K107–K112, K117, K118, K123–K126, K131, K132, K136, U328, U353, U359, D018–D043, K141–145 and K147–151 wastes, soils that are contaminated with D012–D017 that pass the EP toxicity test but fail the TCLP test are prohibited from land disposal.

(b) Effective [insert date two years from date of publication], debris that are contaminated with D018–D043, K141–K145, or K147–K151 wastes, and debris that are contaminated with D012–D017 wastes that pass the EP toxicity test but fail the TCLP test are prohibited from land disposal.

(c) Between [insert date of publication] and [insert date two years from date of publication], the wastes included in paragraphs (a) and (b) of this section may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in § 268.5(h)(2).

(d) The requirements of paragraphs (a) and (b) of this section do not apply if:

(1) The wastes meet the applicable standards specified in subpart D of this part;

(2) Persons have been granted an exemption from a prohibition pursuant to a petition under § 268.6, with respect to those wastes and units covered by the petition;

(3) The wastes meet the applicable alternate standards established pursuant to a petition granted under § 268.44;

(4) Persons have been granted an extension to the effective date of a prohibition pursuant to § 268.5, with respect to those wastes covered by the extension.

(e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in §§ 268.40 and 268.48, the initial generator must test a representative sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable subpart D of this part levels, the waste is prohibited from land disposal, and all requirements of 40 CFR part 268 are applicable, except as otherwise specified.

Subpart D—Treatment Standards

20. Section 268.40 is revised to read as follows:

§ 268.40 Applicability of treatment standards.

(a) A waste identified in the Table Treatment Standards for Hazardous Wastes in this section may be land disposed only if it meets the requirements found in the table. For each waste, the table identifies one of three types of requirements ("treatment standards"):

(1) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in the table for that waste ("total waste standards"); or

(2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in the table ("waste extract standards"); or

(3) The waste must be treated using the technology specified in the table ("technology standard").

(b) For waste covered by the total waste standards and waste extract standards, compliance is based upon grab samples, unless otherwise noted in the table. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure, must be used. An exception is made for D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038, and U136, for which either of two test methods may be used: Method 1311, or Method 1310, the Extraction Procedure Toxicity Test, both found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW 846 as incorporated by reference in § 260.11 of this chapter. For wastes covered by a technology standard, the wastes may be land disposed after it is treated using that specified technology or an equivalent treatment technology approved by the Administrator under the procedures set forth in § 268.42(b).

(c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

(d) Notwithstanding the prohibitions specified in paragraph (a) of this section, treatment and disposal facilities may demonstrate (and certify pursuant to § 268.7(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in the Table Treatment Standards for Hazardous Wastes in this section, provided the following conditions are satisfied:

(1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of 40 CFR part 264, subpart O, or 40 CFR part 265, subpart O, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

(2) The treatment or disposal facility has used the methods referenced in paragraph (c)(1) of this section to treat the organic constituents; and

(3) The treatment or disposal facility has been unable to detect the organic constituents despite using its best good-faith efforts as defined by applicable Agency guidance or standards. Until such guidance or standards are developed, the treatment or disposal facility may demonstrate such good-faith efforts by achieving detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this section by an order of magnitude.

(e) If a treatment standard has been established in the Table Treatment Standards for Hazardous Wastes for a hazardous waste that is itself hazardous debris, the waste is subject to those standards rather than the standards for hazardous debris under § 268.45.

(f) Hazardous soil may be land disposed in a subtitle C unit only if all constituents subject to treatment in the hazardous soil are equal to or less than applicable total (for organics) or leachate (for metals) concentrations found in § 268.47.

(g) Soils that are hazardous solely because they exhibit the characteristics of ignitability, corrosivity, or reactivity, must be treated by deactivation technologies which eliminate these characteristics. If other constituents subject to treatment are also present, they must be treated to achieve the technology-based treatment standards found in § 268.48.

TREATMENT STANDARDS FOR HAZARDOUS WASTES

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
D001	All descriptions based on 40 CFR 261.21, except for the §261.21(a)(1) High TOC subcategory, managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems.	NA	NA	DEACT, and meet F039; or FSUBS; RORGS; or INCIN.	NA	DEACT, and meet F039; or FSUBS; RORGS; or INCIN.	NA.
D001	All descriptions based on 40 CFR 261.21, except for the §261.21(a)(1) High TOC subcategory, managed in CWA/CWA-equivalent/Class I SDWA systems.	NA	NA	DEACT	NA	DEACT	NA.
D001	All descriptions based on 40 CFR 261.21(a)(1)—High TOC Ignitable Liquids Subcategory-Greater than or equal to 10% total organic carbon.	NA	NA	NA	NA	FSUBS; RORGS; or INCIN.	NA.
D002	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D002	Acid, alkaline, and other subcategory based on 261.22 managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	NA	NA	DEACT and meet F039.	NA	DEACT and meet F039.	NA.
D002	Acid, alkaline, and other subcategory based on 261.22 managed in CWA, CWA-equivalent, or Class I SDWA systems.	NA	NA	DEACT	NA	DEACT	NA.
D003	Reactive sulfides based on 261.23(a)(5). Dilution is not allowed per 58 FR 14317, March 17, 1993.	NA	NA	DEACT	NA	DEACT	NA.
D003	Explosives based on 261.23(a) (6), (7), and (8).	NA	NA	DEACT	NA	DEACT	NA.
D003	Water reactives based on 261.23(a) (2), (3), and (4).	NA	NA	NA	NA	DEACT	NA.
D003	Other reactives based on 261.23(a)(1)..	NA	NA	DEACT	NA	DEACT	NA.
D003	Reactive cyanides subcategory (Total) based on 261.23(a)(5).	Cyanides (Total)	57–12–5	Reserved	NA	590	Total (mg/kg).
D003	Reactive cyanides subcategory (Amenable) based on 261.23(a)(5).	Cyanides (Amenable)	57–12–5	0.86	Grab	30	Total (mg/kg).
D004		Arsenic	7440–38–2	5.0	Grab	5.0	TCLP (mg/l).
D004	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D005		Barium	7440–39–3	100	Grab	100	TCLP (mg/l).

D005	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D006		Cadmium	7440–43–9	1.0	Grab	1.0	TCLP (mg/l).
D006	Cadmium containing batteries	Cadmium	7440–43–9	NA	NA	RTHRM	NA.
D006	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D007		Chromium (Total)	7440–47–32	5.0	Grab	5.0	TCLP (mg/l).
D007	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D008		Lead	7439–92–1	5.0	Grab	5.0	TCLP (mg/l).
D008	Lead acid batteries (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of 40 CFR 268 or exempted under other EPA regulations (see 40 CFR 266.80).).	Lead	7439–92–1	NA	NA	RLEAD	NA.
D008	Radioactive Lead Solids Subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stablization, nor do they include organo-lead materials that can be incinerated and stablized as ash.).	Lead-Radioactive	7439–92–1	NA	NA	MACRO	NA.
D008	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D009	Low Mercury Subcategory—less than 260 mg/kg Mercury.	Mercury	7439–97–6	0.20	Grab	0.20	TCLP (mg/l).
D009	High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury—contains mercury and organics (and are not incinerator residues).	Mercury	7439–97–6	NA	NA	IMERC; OR RMERC.	NA.
D009	High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury—inorganics (including incinerator residues and residues from RMERC).	Mercury	7439–97–6	NA	NA	RMERC	NA.
D009	Elemental mercury contaminated with radioactive materials.	Mercury-Radioactive	7439–97–6	NA	NA	AMLGM	NA.
D009	Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.	Mercury-Radioactive	7439–97–6	NA	NA	IMERC	NA.

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
D009	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D010		Selenium	7782-49-2	1.0	Grab	5.7	TCLP (mg/l).
D010	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D011		Silver	7440-22-4	5.0	Grab	5.0	TCLP (mg/l).
D011	Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory.	NA	NA	NA	NA	HLVIT	NA.
D012		Endrin	72-20-8	BIODG or INCIN	NA	0.13	Total (mg/kg).
D012	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Endrin	72-20-8	BIODG or INCIN	NA	0.13 (and meet §268.48 standards).	Total (mg/kg).
D013		Lindane	58-89-9	CARBN or INCIN	NA	0.066	Total (mg/kg).
D013	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Lindane	58-89-9	CARBN or INCIN	NA	0.066 (and meet §268.48 standards).	Total (mg/kg)
D014		Methoxychlor	72-43-5	WETOX or INCIN	NA	0.18	Total (mg/kg).
D014	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Methoxychlor	72-43-5	WETOX or INCIN	NA	0.18 (and meet §268.48 standards).	Total (mg/kg).
D015		Toxaphene	8001-35-2	BIODG or INCIN	NA	2.6	Total (mg/kg).
D015	Managed in non-CWA-/non-CWA equivalent/non-Class I SDWA systems.	Toxaphene	8001-35-2	BIODG or INCIN	NA	2.6 (and meet §268.48 standards).	Total (mg/kg).
D016		2,4-D	94-75-7	CHOXD, BIODG, or INCIN.	NA	10	Total (mg/kg).
D016	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	2,4-D	94-75-7	CHOXD, BIODG, or INCIN.	NA	10 (and meet §268.48 standards).	Total (mg/kg).
D017		2,4,5-TP (Silvex)	93-72-1	CHOXD or INCIN	NA	7.9	Total (mg/kg).
D017	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	2,4,5-TP (Silvex)	93-72-1	CHOXD or INCIN	NA	7.9 (and meet §268.48 standards).	Total (mg/kg).
D018	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Benzene	71-43-2	0.14	Grab	10 (and meet §268.48 standards.	Total (mg/kg).
D019	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Carbon tetrachloride	56-23-5	0.057	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
D020	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Chlordane	57-74-9	0.033	Grab	0.26 (and meet §268.48 standards).	Total (mg/kg).
D021	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Chlorobenzene	108-90-7	0.057	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
D022	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Chloroform	67-66-3	0.046	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).

D023	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	o-Cresol	95–48–7	0.11	Grab	5.6 (and meet §268.48 standards).	Total (mg/kg).
D024	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	m-Cresol	108–39–4	0.77	Grab	3.2 (and meet §268.48 standards).	Total (mg/kg).
D025	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	p-Cresol	106–44–5	0.77	Grab	3.2 (and meet §268.48 standards).	Total (mg/kg).
D026	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Cresol	NA	0.77	Grab	8.8 (and meet §268.48 standards).	Total (mg/kg).
D027	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	1,4-Dichlorobenzene	106–46–7	0.09	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
D028	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	1,2–Dichloroethane	107–06–2	0.21	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
D029	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	1,1-Dichloroethylene	75–35–4	0.025	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
D030	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	2,4-Dinitrotoluene	121–14–2	0.32	Grab	140 (and meet §268.48 standards).	Total (mg/kg).
D031	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Heptachlor	76–44–8	0.0012	Grab	0.066 (and meet §268.48 standards).	Total (mg/kg).
D031	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Heptachlor epoxide	76–44–8	0.016	Grab	0.066 (and meet §268.48 standards).	Total (mg/kg).
D032	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Hexachlorobenzene	118–74–1	0.055	Grab	10 (and meet §268.48 standards).	Total (mg/kg).
D033	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Hexachloro-1,3-butadiene	87–68–3	0.055	Grab	5.6 (and meet §268.48 standards).	Total (mg/kg).
D034	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Hexachloroethane	67–72–1	0.055	Grab	30 (and meet §268.48 standards).	Total (mg/kg).
D035	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Methyl ethyl ketone	78–93–3	0.28	Grab	36 (and meet §268.48 standards).	Total (mg/kg).
D036	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Nitrobenzene	98–95–3	0.068	Grab	14 (and meet §268.48 standards).	Total (mg/kg).
D037	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Pentachlorophenol	87–86–5	0.89	Grab	7.4 (and meet §268.48 standards).	Total (mg/kg).
D038	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Pyridine	110–86–1	0.014	Grab	16 (and meet §268.48 standards).	Total (mg/kg).
D039	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Tetrachloroethylene	127–18–4	0.056	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
D040	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Trichloroethylene	79–01–6	0.054	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
D041	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	2,4,5-Trichlorophenol	95–95–4	0.18	Grab	7.4 (and meet §268.48 standards).	Total (mg/kg).
D042	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	2,4,6-Trichlorophenol	88–06–2	0.035	Grab	7.4 (and meet §268.48 standards).	Total (mg/kg).
D043	Managed in non-CWA/non-CWA equivalent/non-Class I SDWA systems.	Vinyl chloride	75–01–4	0.27	Grab	6.0 (and meet §268.48 standards).	Total (mg/kg).
F001–F005	Spent solvents	Acetone	67–64–1	0.28	Grab	160	Total (mg/l)
		Benzene	71–43–2	0.070	Grab	3.7	Total (mg/kg).
		n-Butyl alcohol	71–36–3	5.6	Grab	2.6	Total (mg/l).
		Carbon disulfide	75–15–0	NA	Grab	4.8	TCLP (mg/l).
		Carbon tetrachloride	56–23–5	0.057	Grab	5.6	Total (mg/l).
		Chlorobenzene	108–90–7	0.057	Grab	5.7	Total (mg/l).
		Cresols (and cresylic acid)	NA	0.77	Grab	3.2	Total (mg/l).
		o-Cresol	95–48–7	0.11	Grab	5.6	Total (mg/l).
		Cyclohexanone	108–94–1	NA	Grab	0.75	TCLP (mg/l).
		o-Dichlorobenzene	95–50–1	0.088	Grab	6.2	Total (mg/l).
		Ethyl acetate	141–7–6	0.34	Grab	33	Total (mg/l).
		Ethyl benzene	100–41–4	0.057	Grab	6.0	Total (mg/l).
		Ethyl ether	60–29–7	0.12	Grab	160	Total (mg/l).
		Isobutyl Alcohol	78–83–1	5.6	Grab	170	Total (mg/l).
		Methanol	67–56–1	NA	Grab	0.75	TCLP (mg/l).
		Methylene chloride	75–9–2	0.069	Grab	33	Total (mg/l).
		Methyl ethyl ketone	78–93–3	0.28	Grab	36	Total (mg/l).
		Methyl isobutyl ketone	108–10–1	0.14	Grab	33	Total (mg/l).
		Nitrobenzene	98–95–3	0.068	Grab	14	Total (mg/l).
		Pyridine	110–86–1	0.014	Grab	16	Total (mg/l).
		Tetrachloroethylene	127–18–4	0.056	Grab	5.6	Total (mg/l).
		Toluene	108–88–3	0.08	Grab	28	Total (mg/l).
		1,1,1-Trichloroethane	71–55–6	0.054	Grab	5.6	Total (mg/l).
		1,1,2-Trichloroethane	79–00–5	0.030	Grab	7.6	Total (mg/kg).
		1,1,2-Trichloro-1,2,2-trifluoroethane	76–13–1	0.057	Grab	28	Total (mg/l).
		Trichloroethylene	79–01–6	0.054	Grab	5.6	Total (mg/l).
		Trichlorofluoromethane	75–69–4	0.02	Grab	33	Total (mg/l).
		Xylenes (total)	1330–20–7	0.32	Grab	28	Total (mg/l).
F001–F005	(Pharmaceutical industry wastewater subcategory).	Methylene chloride	75–09–2	0.44	Grab	NA	NA.
F005		2-Nitropropane	79–46–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
F005		2-Ethoxyethanol	110–80–5	BIODG; or INCIN	NA	INCIN	NA.
F006		Cadmium	7440–43–9	1.6	Grab	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	NA	NA	5.2	TCLP (mg/l).
		Chromium	7440–47–3	0.32	Grab	NA	NA.
		Cyanides (Total)	57–12–5	1.2	Grab	590	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Grab	30	Total (mg/kg).
		Lead	7439–92–1	0.040	Grab	0.51	TCLP (mg/l).

F007		Nickel	7440–02–0	0.44	Grab	0.32	TCLP (mg/l).
		Silver	7440–22–4	NA	NA	0.072	TCLP (mg/l).
		Cadmium	7440–43–9	NA	NA	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	0.32	Grab	5.2	TCLP (mg/l).
		Cyanides (Total)	57–12–5	1.2	Grab	590	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Grab	30	Total (mg/kg).
		Lead	7439–92–1	0.04	Grab	0.51	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	0.32	TCLP (mg/l).
F008		Silver	7440–22–4	NA	NA	0.072	TCLP (mg/l).
		Cadmium	7440–43–9	NA	NA	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	NA	NA	5.2	TCLP (mg/l).
		Chromium	7440–47–3	0.32	Grab	NA	NA.
		Cyanides (Total)	57–12–5	1.2	Grab	590	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Grab	30	Total (mg/kg).
		Lead	7439–92–1	0.04	Grab	0.51	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	0.32	TCLP (mg/l).
F009		Silver	7440–22–4	NA	NA	0.072	TCLP (mg/l).
		Cadmium	7440–43–9	NA	NA	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	NA	NA	5.2	TCLP (mg/l).
		Chromium	7440–47–3	0.32	Grab	NA	NA.
		Cyanides (Total)	57–12–5	1.2	Grab	590	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Grab	30	Total (mg/kg).
		Lead	7439–92–1	0.04	Grab	0.51	TCLP (mg/l).
		Nickel	17440–02–0	0.44	Grab	0.32	TCLP (mg/l).
		Silver	7440–22–4	NA	NA	0.072	TCLP (mg/l).
F010		Cyanides (Total)	57–12–5	1.2	Grab	1.5	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Grab	NA	NA.
F011		Cadmium	7440–43–9	NA	NA	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	0.32	Grab	5.2	TCLP (mg/l).
		Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
		Lead	7439–92–1	0.04	Grab	0.51	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	0.32	TCLP (mg/l).
		Silver	7440–22–4	NA	NA	0.072	TCLP (mg/l).
F012		Cadmium	7440–43–9	NA	NA	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	0.32	Grab	5.2	TCLP (mg/l).
		Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
		Lead	7439–92–1	0.04	Grab	0.51	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	0.32	TCLP (mg/l).
		Silver	7440–22–4	NA	NA	0.072	TCLP (mg/l).
F019		Chromium (Total)	7440–47–3	0.32	Grab	5.2	TCLP (mg/l).
		Cyanides (Total)	57–12–5	1.2	Grab	590	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Grab	30	Total (mg/kg).
F020–F023, and F026–F028	Dioxin containing wastes (these waste codes are not subcategorized into wastewater and nonwastewaters).	HxCDD—All Hexachlorodibenzo-p-dioxins.	NA	<1 ppb	Grab	<1	TCLP (ppb).
		HxCDF—All Hexachlorodibenzofurans.	NA	<1 ppb	Grab	<1	TCLP (ppb).
		PeCDD—All Pentachlorodibenzo-p-dioxins.	NA	<1 ppb	Grab	<1	TCLP (ppb).
		PeCDF—All Pentachlorodibenzofurans.	NA	<1 ppb	Grab	<1	TCLP (ppb).
		TCDD—All Tetrachlorodibenzo-p-dioxins.	NA	<1 ppb	Grab	<1	TCLP (ppb).
		TCDF—All Tetrachlorodibenzofurans.	NA	<1 ppb	Grab	<1	TCLP (ppb).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
		2,4,5-Trichlorophenol	95–95–4	<0.05 ppm	Grab	<0.05	TCLP (ppm).
		2,4,6-Trichlorophenol	88–06–2	<0.05 ppm	Grab	<0.05	TCLP (ppm).
		2,3,4,6-Tetrachlorophenol	58–90–2	<0.05 ppm	Grab	<0.05	TCLP (ppm).
		Pentachlorophenol	87–86–5	<0.01 ppm	Grab	<0.01	TCLP (ppm).
F024		All F024 organic standards	NA	INCIN	NA	INCIN	NA.
F024		2-Chloro-1,3-butadiene	126–99–8	0.28	Grab	0.28	Total (mg/kg).
		3-Chloropropene	107–05–1	0.28	Grab	0.28	Total (mg/kg).
		1,1-Dichloroethane	75–34–3	0.014	Grab	0.014	Total (mg/kg).
		1,2-Dichloroethane	107–06–2	0.014	Grab	0.014	Total (mg/kg).
		1,2-Dichloropropane	78–87–5	0.014	Grab	0.014	Total (mg/kg).
		cis-1,3-Dichloropropene	10061–01–5	0.014	Grab	0.014	Total (mg/kg).
		trans-1,3–Dichloropropene	10061–02–6	0.014	Grab	0.014	Total (mg/kg).
		Bis(2-ethylhexyl)phthalate	117–81–7	0.036	Grab	1.8	Total (mg/kg).
		Hexachloroethane	67–72–1	0.036	Grab	1.8	Total (mg/kg).
		Chromium (Total)	7440–47–32	0.35	Grab	0.073	TCLP (mg/l).
		Lead	7439–92–1	NA	NA	0.021	TCLP (mg/l).
		Nickel	7440–02–0	0.47	Grab	0.088	TCLP (mg/l).
F025	Light ends subcategory	Chloroform	67–66–3	0.046	Composite	6.2	Total (mg/kg).
		1,2-Dichloroethane	107–06–2	0.21	Composite	6.2	Total (mg/kg).
		1,1-Dichloroethylene	75–35–4	0.025	Composite	6.2	Total (mg/kg).
		Methylene chloride	75–9–2	0.089	Composite	31	Total (mg/kg).
		Carbon tetrachloride	56–23–5	0.057	Composite	6.2	Total (mg/kg).
		1,1,2-Trichloroethane	79–00–5	0.054	Composite	6.2	Total (mg/kg).
		Trichloroethylene	79–01–6	0.054	Composite	5.6	Total (mg/kg).
		Vinyl chloride	75–01–4	0.27	Composite	33	Total (mg/kg).
F025	Spent filters/aids and desiccants subcategory.	Chloroform	67–66–3	0.046	Composite	6.2	Total (mg/kg).
		Methylene chloride	75–9–2	0.089	Composite	31	Total (mg/kg).
		Carbon tetrachloride	56–23–5	0.057	Composite	6.2	Total (mg/kg).
		1,1,2-Trichloroethane	79–00–5	0.054	Composite	6.2	Total (mg/kg).
		Trichloroethylene	79–01–6	0.054	Composite	5.6	Total (mg/kg).
		Vinyl chloride	75–01–4	0.27	Composite	33	Total (mg/kg).
		Hexachlorobenzene	118–74–1	0.055	Composite	37	Total (mg/kg).
		Hexachlorobutadiene	87–68–3	0.055	Composite	28	Total (mg/kg).
		Hexachloroethane	67–72–1	0.055	Composite	30	Total (mg/kg).
F037		Acenaphthene	83–32–9	0.059	Composite	NA	NA.
		Anthracene	120–12–7	0.059	Composite	28	Total (mg/kg).
		Benzene	71–43–2	0.14	Composite	14	Total (mg/kg).
		Benzo (a) anthracene	56–55–3	0.059	Composite	20	Total (mg/kg).
		Benzo (a) pyrene	50–32–8	0.061	Composite	12	Total (mg/kg).
		Bis(2-ethylhexyl) phthalate	117–81–7	0.28	Composite	7.3	Total (mg/kg).
		Chrysene	218–01–9	0.059	Composite	15	Total (mg/kg).
		Di-n-butyl phthalate	84–74–2	0.057	Composite	3.6	Total (mg/kg).
		Ethylbenzene	100–41–4	0.057	Composite	14	Total (mg/kg).
		Fluorene	86–73–7	0.059	Composite	NA	NA
		Naphthalene	91–20–3	0.059	Composite	42	Total (mg/kg).
		Phenanthrene	85–01–8	0.059	Composite	34	Total (mg/kg).
		Phenol	108–95–2	0.039	Composite	3.6	Total (mg/kg).
		Pyrene	129–00–0	0.067	Composite	36	Total (mg/kg).
		Toluene	108–88–3	0.08	Composite	14	Total (mg/kg).
		Xylene(s)	1330–20–7	0.32	Composite	22	Total (mg/kg).

		Cyanides (Total)	57–12–5	0.028	grab	1.8	Total (mg/kg).
		Chromium (Total)	7440–47–3	0.2	grab	1.7	TCLP (mg/l).
		Lead	7439–92–1	0.037	grab	NA	NA
		Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
F038		Benzene	71–43–2	0.14	Composite	14	Total (mg/kg).
		Benzo(a) pyrene	50–32–8	0.061	Composite	12	Total (mg/kg).
		Bis(2-ethylhexyl) phthalate	117–81–7	0.28	Composite	7.3	Total (mg/kg).
		Chrysene	218–01–9	0.059	Composite	15	Total (mg/kg).
		Di-n-butyl phthalate	84–74–2	0.057	Composite	3.6	Total (mg/kg).
		Ethylbenzene	100–41–4	0.057	Composite	14	Total (mg/kg).
		Fluorene	86–73–7	0.059	Composite	NA	NA.
		Naphthalene	91–20–3	0.059	Composite	42	Total (mg/kg).
		Phenanthrene	85–01–8	0.059	Composite	34	Total (mg/kg).
		Phenol	108–95–2	0.039	Composite	3.6	Total (mg/kg).
		Pyrene	129–00–0	0.067	Composite	36	Total (mg/kg).
		Toluene	108–88–3	0.080	Composite	14	Total (mg/kg).
		Xylene(s)	1330–20–7	0.32	Composite	22	Total (mg/kg).
		Cyanides (Total)	57–12–5	0.028	grab	1.8	Total (mg/kg).
		Chromium (Total)	7440–47–3	0.2	grab	1.7	TCLP (mg/l).
		Lead	7439–92–1	0.037	grab	NA	NA.
		Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
(1)		Acetone	67–64–1	0.28	Composite	160	Total (mg/kg).
		Acenaphthalene	208–96–8	0.059	Composite	3.4	Total (mg/kg).
		Acenaphthene	83–32–9	0.059	Composite	4.0	Total (mg/kg).
		Acetonitrile	75–05–8	0.17	Composite	NA	NA.
		Acetophenone	96–86–2	0.010	Composite	9.7	Total (mg/kg).
		2-Acetyl-aminofluorene	53–96–3	0.059	Composite	140	Total (mg/kg).
		Acrolein	107–02–8	0.29	Composite	NA	NA.
		Acrylonitrile	107–13–1	0.24	Composite	84	Total (mg/kg).
		Aldrin	309–00–2	0.021	Composite	0.066	Total (mg/kg).
		4-Aminobiphenyl	192–67–1	0.13	Composite	NA	NA.
		Aniline	62–53–3	0.810	Composite	14	Total (mg/kg).
		Anthracene	120–12–7	0.059	Composite	4.0	Total (mg/kg).
		Aramite	140–57–8	0.36	Composite	NA	NA.
		Aroclor 1016	12674–11–2	0.013	Composite	0.92	Total (mg/kg).
		Aroclor 1221	11104–28–2	0.014	Composite	0.92	Total (mg/kg).
		Aroclor 1232	211141–16–5	0.013	Composite	0.92	Total (mg/kg).
		Aroclor 1242	53469–21–9	0.017	Composite	0.92	Total (mg/kg).
		Aroclor 1248	12672–29–6	0.013	Composite	0.92	Total (mg/kg).
		Aroclor 1254	11097–69–1	0.014	Composite	1.8	Total (mg/kg).
		Aroclor 1260	11096–82–5	0.014	Composite	1.8	Total (mg/kg).
		alpha-BHC	319–84–6	0.00014	Composite	0.066	Total (mg/kg).
		beta-BHC	319–85–7	0.00014	Composite	0.066	Total (mg/kg).
		delta-BHC	319–86–8	0.023	Composite	0.066	Total (mg/kg).
		gamma-BHC	58–89–9	0.0017	Composite	0.066	Total (mg/kg).
		Benzene	71–43–2	0.140	Composite	36	Total (mg/kg).
		Benz(a) anthracene	56–55–3	0.059	Composite	8.2	Total (mg/kg).
		Benzo(b) fluoranthene	205–99–2	0.055	Composite	3.4	Total (mg/kg).
		Benzo(k) fluoranthene	207–08–9	0.059	Composite	3.4	Total (mg/kg).
		Benzo(g,h,i) perylene	191–24–2	0.0055	Composite	1.5	Total (mg/kg).
		Benzo(a) pyrene	50–32–8	0.061	Composite	8.2	Total (mg/kg).
		Bromodi chloromethane	75–27–4	0.35	Composite	15	Total (mg/kg).
		Bromoform	75–25–2	0.63	Composite	15	Total (mg/kg).
		Bromomethane (methylbromide)	74–83–9	0.11	Composite	15	Total (mg/kg).
		4-Bromophenyl phenyl ether	101–55–3	0.055	Composite	15	Total (mg/kg).
		n-Butyl alcohol	171–36–3	5.6	Composite	2.6	Total (mg/kg).
		Butyl benzyl phthalate	85–68–7	0.017	Composite	7.9	Total (mg/kg).
		2-sec-Butyl-4,6-dinitrophenol	88–85–7	0.066	Composite	2.5	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
		Carbon tetrachloride	56–23–5	0.057	Composite	5.6	Total (mg/kg).
		Carbon disulfide	75–15–0	0.014	Composite	NA	NA.
		Chlordane	57–74–9	0.0033	Composite	0.13	Total (mg/kg).
		p-Chloroaniline	106–47–8	0.46	Composite	16	Total (mg/kg).
		Chlorobenzene	108–90–7	0.057	Composite	5.7	Total (mg/kg).
		Chlorobenzilate	510–15–6	0.10	Composite	NA	NA.
		2-chloro-1,3-butadiene	126–99–8	0.057	Composite	NA	NA.
		Chloro dibromomethane	124–48–1	0.057	Composite	15	Total (mg/kg).
		Chloroethane	75–00–3	0.27	Composite	6.0	Total (mg/kg).
		bis(2-Chloro ethoxy) methane	111–91–1	0.036	Composite	7.2	Total (mg/kg).
		bis(2-Chloroethyl)ether	111–44–4	0.033	Composite	7.2	Total (mg/kg).
		Chloroform	67–66–3	0.046	Composite	5.6	Total (mg/kg).
		bis(2-Chloroisopropyl) ether	39638–32–9	0.055	Composite	7.2	Total (mg/kg).
		p-Chloro-m-cresol	59–50–7	0.018	Composite	14	Total (mg/kg).
		Chloromethane (Methyl chloride)	74–87–3	0.19	Composite	33	Total (mg/kg).
		2-Chloronaphthalene	91–58–7	0.055	Composite	5.6	Total (mg/kg).
		2-Chlorophenol	95–57–8	0.044	Composite	5.7	Total (mg/kg).
		3-Chloropropene	107–05–1	0.036	Composite	28	Total (mg/kg).
		Chrysene	218–01–9	0.059	Composite	8.2	Total (mg/kg).
		o-Cresol	95–48–7	0.11	Composite	5.6	Total (mg/kg).
		Cresol (m- and p-isomers)	NA	0.77	Composite	3.2	Total (mg/kg).
		Cyclo hexanone	108–94–1	0.36	Composite	NA	NA.
		1,2-Dibromo-3- chloropropane	96–12–8	0.11	Composite	15	Total (mg/kg).
		1,2-Dibro moethane (Ethylene dibromide).	106–93–4	0.028	Composite	15	Total (mg/kg).
		Dibromo methane	74–95–3	0.11	Composite	15	Total (mg/kg).
		2,4-Dichloro pheno xyacetic acid (2,4-D).	94–75–7	0.72	Composite	10	Total (mg/kg).
		o,p'-DDD	53–19–0	0.023	Composite	0.087	Total (mg/kg).
		p,p'-DDD	72–54–8	0.023	Composite	0.087	Total (mg/kg).
		o,p'-DDE	3424–82–6	0.031	Composite	0.087	Total (mg/kg)
		p,p'-DDE	72–55–9	0.031	Composite	0.087	Total (mg/kg)
		o,p'-DDT	789–02–6	0.0039	Composite	0.087	Total (mg/kg)
		p,p'-DDT	50–29–30.0	039	Composite	0.087	Total (mg/kg).
		Dibenz(a,h) anthracene	53–70–3	0.055	Composite	8.2	Total (mg/kg).
		Dibenzo(a,e) pyrene	192–65–4	0.061	Composite	NA	NA.
		m-Dichlorobenzene	541–73–1	0.036	Composite	6.2	Total (mg/kg).
		o-Dichlorobenzene	95–50–1	0.088	Composite	6.2	Total (mg/kg).
		p-Dichlorobenzene	106–46–7	0.090	Composite	6.2	Total (mg/kg).
		Dichlorodifluoromethane	75–71–8	0.23	Composite	7.2	Total (mg/kg).
		1,1-Dichloroethane	75–34–3	0.059	Composite	7.2	Total (mg/kg).
		1,2-Dichloroethane	107–06–2	0.21	Composite	7.2	Total (mg/kg).
		1,1-Dichloroethylene	75–35–4	0.025	Composite	33	Total (mg/kg).
		trans-1,2-Dichloroethene	NA	0.054	Composite	33	Total (mg/kg).
		2,4-Dichlorophenol	120–83–2	0.044	Composite	14	Total (mg/kg).
		2,6-Dichlorophenol	87–65–0	0.044	Gomposite	14	Total (mg/kg).
		1,2-Dichloropropane	78–87–5	0.85	Composite	18	Total (mg/kg).
		cis-1,3-Dichloropropene	10061–01–5	0.036	Composite	18	Total (mg/kg).
		trans-1,3-Dichloropropene	10061–02–6	0.036	Composite	18	Total (mg/kg).
		Dieldrin	60–57–1	0.017	Composite	0.13	Total (mg/kg).
		Diethylphthalate	84–66–2	0.20	Composite	28	Total (mg/kg).

2,-4-Dimethylphenol	105–67–9	0.036	Composite	14	Total (mg/kg).
Dimethylphthalate	131–11–3	0.047	Composite	28	Total (mg/kg).
Di-n-butylphthalate	84–74–2	0.057	Composite	28	Total (mg/kg).
1,4-Dinitrobenzene	100–25–4	0.32	Composite	2.3	Total (mg/kg).
4,6-Dinitro-o-cresol	534–52–1	0.28	Composite	160	Total (mg/kg).
2,4-Dinitrophenol	51–28–5	0.12	Composite	160	Total (mg/kg).
2,4-Dinitrotoluene	121–14–2	0.32	Composite	140	Total (mg/kg).
2,6-Dinitrotoluene	606–20–2	0.55	Composite	28	Total (mg/kg).
Di-n-octylphthalate	117–84–0	0.017	Composite	28	Total (mg/kg).
Di-n-propylnitrosoamine	621–64–7	0.40	Composite	14	Total (mg/kg).
Diphenylamine	122–39–4	0.52	Composite	NA	NA.
1,2-Diphenylhydrazine	122–66–7	0.087	Composite	NA	NA.
Diphenylnitrosanine	621–64–7	0.40	Composite	NA	NA.
1,4-Dioxane	123–91–1	0.12	Composite	170	Total (mg/kg).
Disulfoton	298–04–4	0.017	Composite	6.2	Total (mg/kg).
Endosulfan I	939–98–8	0.023	Composite	0.066	Total (mg/kg).
Endosulfan II	33213–6–5	0.029	Composite	0.13	Total (mg/kg).
Endosulfansulfate	1031–07–8	0.029	Composite	0.13	Total (mg/kg).
Endrin	72–20–8	0.0028	Composite	0.13	Total (mg/kg).
Endrinaldehyde	7421–93–4	0.025	Composite	0.13	Total (mg/kg).
Ethylacetate	141–78–6	0.34	Composite	33	Total (mg/kg).
Ethyicyanide	107–12–0	0.24	Composite	360	Total (mg/kg).
Ethylbenzene	100–41–4	0.057	Composite	6.0	Total (mg/kg).
Ethylether	60–29–7	0.12	Composite	160	Total (mg/kg).
bis(2-Ethylhexyl) phthalate	117–81–7	0.28	Composite	28	Total (mg/kg).
Ethylmethacrylate	97–63–2	0.14	Composite	160	Total (mg/kg).
Ethyleneoxide	75–21–8	0.12	Composite	NA	NA.
Famphur	52–85–7	0.017	Composite	15	Total (mg/kg).
Fluoranthene	206–44–0	0.068	Composite	8.2	Total (mg/kg).
Fluorene	86–73–7	0.059	Composite	4.0	Total (mg/kg).
Fluorotrichloromethane	75–69–4	0.020	Composite	33	Total (mg/kg).
Heptachlor	76–44–8	0.0012	Composite	0.066	Total (mg/kg).
Heptachlorepoxide	1024–57–3	0.016	Composite	0.066	Total (mg/kg).
Hexachlorobenzene	118–74–1	0.055	Composite	37	Total (mg/kg).
Hexachlorobutadiene	87–68–3	0.055	Composite	28	Total (mg/kg).
Hexachlorocyclopentadiene	77–47–4	0.057	Composite	3.6	Total (mg/kg).
Hexachlorodibenzo furans	NA	0.000063	Composite	0.001	Total (mg/kg).
Hexachlorodibenzo pdioxins	NA	0.000063	Composite	0.001	Total (mg/kg).
Hexachloroethane	67–72–1	0.055	Composite	28	Total (mg/kg).
Hexachloropropene	1888–71–7	0.035	Composite	28	Total (mg/kg).
Indeno (1,2,3,-c,d) pyrene	193–39–5	0.0055	Composite	8.2	Total (mg/kg).
Iodomethane	74–88–4	0.19	Composite	65	Total (mg/kg).
Isobutanol	78–83–1	5.6	Composite	170	Total (mg/kg).
Isodrin	465–73–6	0.021	Composite	0.066	Total (mg/kg).
Isosafrole	120–58–1	0.081	Composite	2.6	Total (mg/kg).
Kepone	143–50–8	0.0011	Composite	0.13	Total (mg/kg).
Methacrylonitrile	126–98–7	0.24	Composite	84	Total (mg/kg).
Methanol	67–56–1	5.6	Composite	NA	NA.
Methapyrilene	91–80–5	0.081	Composite	1.5	Total (mg/kg).
Methoxychlor	72–43–5	0.25	Composite	0.18	Total (mg/kg).
3-Methylcholanthrene	56–49–5	0.0055	Composite	15	Total (mg/kg).
4.4-Methylenebis(2-chloroaniline)	101–14–4	0.50	Composite	35	Total (mg/kg).
Methylenechloride	75–09–2	0.089	Composite	33	Total (mg/kg).
Methylethylketone	78–93–3	0.28	Composite	36	Total (mg/kg).
Methylisobutylketone	108–10–1	0.14	Composite	33	Total (mg/kg).
Methylmethacrylate	80–62–6	0.14	Composite	160	Total (mg/kg).
Methylmethansulfonate	66–27–3	0.018	Composite	NA	NA.
Methylparathion	298–00–0	0.014	Composite	4.6	Total (mg/kg).
Naphthalene	91–20–3	0.059	Composite	3.1	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
		2-Naphthylamine	91–59–8	0.52	Composite	NA	NA.
		p-Nitroaniline	100–01–6	0.028	Composite	28	Total (mg/kg).
		Nitrobenzene	98–95–3	0.068	Composite	14	Total (mg/kg).
		5-Nitrotoluidine	99–55–8	0.32	Composite	28	Total (mg/kg).
		4-Nitrophenol	100–02–7	0.12	Composite	29	Total (mg/kg).
		N-Nitrosodiethylamine	55–18–5	0.40	Composite	28	Total (mg/kg).
		N-Nitrosodimethylamine	62–75–9	0.40	Composite	NA	NA
		N-Nitroso-di-n-butylamine	924–16–3	0.40	Composite	17	Total (mg/kg).
		N-Nitrosomethyl-ethylamine	10595–95–6	0.40	Composite	2.3	Total (mg/kg).
		N-Nitrosomorpho-line	59–89–2	0.40	Composite	2.3	Total (mg/kg).
		N-Nitrosopiperidine	100–75–4	0.013	Composite	35	Total (mg/kg).
		N-Nitrosopyrrolidine	930–55–2	0.013	Composite	35	Total (mg/kg).
		Parathion	56–38–2	0.014	Composite	4.6	Total (mg/kg).
		Pentachlorobenzene	608–93–5	0.055	Composite	37	Total (mg/kg).
		Pentachlorodibenzo-furans	NA	0.000063	Composite	0.001	Total (mg/kg).
		Pentachlorodibenzo-p-dioxins	NA	0.000063	Composite	0.001	Total (mg/kg).
		Pentachloronitro benzene	82–68–8	0.055	Composite	4.8	Total (mg/kg).
		Pentachlorophenol	87–86–5	0.089	Composite	7.4	Total (mg/kg).
		Phenacetin	62–44–2	0.081	Composite	16	Total (mg/kg).
		Phenanthrene	85–01–8	0.059	Composite	3.1	Total (mg/kg).
		Phenol	108–95–2	0.039	Composite	6.2	Total (mg/kg).
		Phorate	298–02–2	0.021	Composite	4.6	Total (mg/kg).
		Phthalic Anhydride	85–44–9	0.069	Composite	NA	NA.
		Pronamide	23950–58–5	0.093	Composite	1.5	Total (mg/kg).
		Pyrene	129–00–0	0.067	Composite	8.2	Total (mg/kg).
		Pyridine	110–86–1	0.014	Composite	16	Total (mg/kg).
		Safrole	94–59–7	0.081	Composite	22	Total (mg/kg).
		Silvex (2,4,5–TP)	93–72–1	0.72	Composite	7.9	Total (mg/kg).
		2,4,5–T	93–76–5	0.72	Composite	7.9	Total (mg/kg).
		1,2,4,5,-Tetrachlorobenzene	95–94–3	0.055	Composite	19	Total (mg/kg).
		Tetrachlorodibenzo-furans	NA	0.000063	Composite	0.001	Total (mg/kg).
		Tetrachlorodibenzo-p-dioxins	NA	0.000063	Composite	0.01	Total (mg/kg).
		1,1,1,2-Tetrachloroethane	630–20–6	0.057	Composite	42	Total (mg/kg).
		1,1,2,2,-Tetrachloroethane	79–34–6	0.057	Composite	42	Total (mg/kg).
		Tetrachloroethylene	127–18–4	0.056	Composite	5.6	Total (mg/kg).
		2,3,4,6-Tetrachlorophenol	58–90–2	0.030	Composite	37	Total (mg/kg).
		Toluene	108–88–3	0.080	Composite	28	Total (mg/kg).
		Toxaphene	8001–35–1	0.0095	Composite	1.3	Total (mg/kg).
		1,2,4-Trichlorobenzene	120–82–1	0.055	Composite	19	Total (mg/kg).
		1,1,1,-Trichloroethane	71–55–6	0.054	Composite	5.6	Total (mg/kg).
		1,1,2-Trichloroethane	79–00–5	0.054	Composite	5.6	Total (mg/kg).
		Trichloroethylene	79–01–6	0.054	Composite	5.6	Total (mg/kg).
		2,4,5-Trichlorophenol	95–95–4	0.18	Composite	37	Total (mg/kg).
		2,4,6-Trichlorophenol	88–06–2	0.035	Composite	37	Total (mg/kg).
		1,2,3-Trichloropropane	96–18–4	0.85	Composite	28	Total (mg/kg).
		1,1,2-Trichloro-1,2,2-trifluoroethane	76–13–1	0.057	Composite	28	Total (mg/kg).
		Tris(2,3-dibromopropyl)	126–72–7	0.11	Composite	NA	NA.
		Vinylchloride	75–01–4	0.27	Composite	33	Total (mg/kg).
		Xylene(s)	1330–20–7	0.32	Composite	28	Total (mg/kg).
		Cyanides (Total)	57–12–5	1.2	Composite	1.8	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.86	Composite	NA	NA.

		Fluoride	16964–48–8	35	Composite	NA	NA.
		Sulfide	8496–25–8	14	Composite	NA	NA.
		Antimony	7440–36–0	1.9	Composite	0.23	TCLP (mg/l).
		Arsenic	7440–38–2	1.4	Composite	5.0	TCLP (mg/l).
		Barium	7440–39–3	1.2	Composite	52	TCLP (mg/l).
		Beryllium	7440–41–7	0.82	Composite	NA	NA.
		Cadmium	7440–43–9	0.20	Composite	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	0.37	Composite	5.2	TCLP (mg/l).
		Copper	7440–50–8	1.3	Composite	NA	NA.
		Lead	7439–92–1	0.28	Composite	0.51	TCLP (mg/l).
		Mercury	7439–97–6	0.15	Composite	0.025	TCLP (mg/l).
		Nickel	7440–02–0	0.55	Composite	0.32	TCLP (mg/l).
		Selenium	7782–49–2	0.82	Composite	5.7	TCLP (mg/l).
		Silver	7440–22–4	0.29	Composite	0.072	TCLP (mg/l).
		Thallium	7440–28–0	1.4	Composite	NA	NA.
		Vanadium	7440–62–2	0.042	Composite	NA	NA.
		Zinc	7440–66–6	1.0	Composite	NA	NA.
K001		Naphthalene	91–20–3	0.031	Grab	1.5	Total (mg/kg).
		Pentachloro phenol	87–86–5	0.18	Grab	7.4	Total (mg/kg).
		Phenan threne	85–01–8	0.031	Grab	1.5	Total (mg/kg).
		Pyrene	129–00–0	0.028	Grab	1.5	Total (mg/kg).
		Toluene	108–88–3	0.028	Grab	28	Total (mg/kg).
		Xylenes (Total)	1330–20–7	0.032	Grab	33	Total (mg/kg).
		Lead	7439–92–1	0.037	Grab	0.51	TCLP (mg/l).
K002		Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
K003		Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
K004		Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
K005		Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
		Cyanides (Total)	57–12–5	0.74	Composite	Reserved	NA.
K006	Anhydrous	Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
K006	Hydrated	Chromium (Total)	7440–47–3	0.9	Composite	5.2	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	NA	NA.
K007		Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
		Cyanides (Total)	57–12–5	0.74	Composite	Reserved	NA.
K008		Chromium (Total)	7440–47–3	0.9	Composite	0.094	TCLP (mg/l).
		Lead	7439–92–1	3.4	Composite	0.37	TCLP (mg/l).
K009		Chloroform	67–66–3	0.1	Grab	6.0	Total (mg/kg).
K010		Chloroform	67–66–3	0.1	Grab	6.0	Total (mg/kg).
K011		Acetonitrile	75–05–8	38	Grab	1.8	Total (mg/kg).
		Acrylonitrile	107–13–1	0.06	Grab	1.4	Total (mg/kg).
		Acrylamide	79–06–1	19	Grab	23	Total (mg/kg).
		Benzene	71–43–2	0.02	Grab	0.03	Total (mg/kg).
		Cyanide (Total)	57–12–5	21	Grab	57	Total (mg/kg).
K013		Acetonitrile	75–05–8	38	Grab	1.8	Total (mg/kg).
		Acrylonitrile	107–13–1	0.06	Grab	1.4	Total (mg/kg).
		Acrylamide	79–06–1	19	Grab	23	Total (mg/kg).
		Benzene	71–43–2	0.02	Grab	0.03	Total (mg/kg).
		Cyanide (Total)	57–12–5	21	Grab	57	Total (mg/kg).
K014		Acetonitrile	75–05–8	38	Grab	1.8	Total (mg/kg).
		Acrylonitrile	107–13–1	0.06	Grab	1.4	Total (mg/kg).
		Acrylamide	79–06–1	19	Grab	23	Total (mg/kg).
		Benzene	71–43–2	0.02	Grab	0.03	Total (mg/kg).
		Cyanide (Total)	57–12–5	21	Grab	57	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
K015		Anthracene	120–12–7	0.059	Grab	3.4	Total (mg/kg).
		Benzal chloride	98–87–3	0.28	Grab	6.2	Total (mg/kg).
		Sum of Benzo (b) fluoranthene and Benzo (k) fluoranthene.	205–08–9 207–08–09.	0.055	Grab	3.4	Total (mg/kg).
		Phenanthrene	85–01–8	0.059	Grab	3.4	Total (mg/kg).
		Toluene	108–88–3	0.08	Grab	6.0	Total (mg/kg).
		Chromium (Total)	7440–47–3	0.32	Grab	1.7	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	0.2	TCLP (mg/l).
K016		Hexachlorobenzene	118–74–1	0.055	Grab	28	Total (mg/kg).
		Hexachlorobutadiene	87–68–3	0.055	Grab	5.6	Total (mg/kg).
		Hexachlorocyclopentadiene	77–47–4	0.057	Grab	5.6	Total (mg/kg).
		Hexachloroethane	67–72–1	0.055	Grab	28	Total (mg/kg).
		Tetrachloroethene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
K017		1,2-Dichloropropane	78–87–5	0.85	Composite	18	Total (mg/kg).
		1,2,3-Trichloropropane	96–18–4	0.85	Composite	28	Total (mg/kg).
		Bis(2-chloroethyl)ether	111–44–4	0.033	Composite	7.2	Total (mg/kg).
K018		Chloroethane	75–00–3	0.27	Grab	6.0	Total (mg/kg).
		Chloromethane	74–87–3	0.19	Grab	NA	NA
		1,1-Dichloro thane	75–34–3	0.059	Grab	6.0	Total (mg/kg).
		1,2-Dichloroethane	107–06–2	0.21	Grab	6.0	Total (mg/kg).
		Hexachlorobenzene	118–74–1	0.055	Grab	28	Total (mg/kg).
		Hexachlorobutadiene	87–68–3	0.055	Grab	5.6	Total (mg/kg).
		Hexachloroethane	67–72–1	0.055	Grab	28	Total (mg/kg).
		Pentachloroethane	76–01–7	NA	NA	5.6	Total (mg/kg).
		1,1,1-Trichloroethane	71–55–6	0.054	Grab	6.0	Total (mg/kg).
K019		Bis(2-chloroethyl)ether	111–44–4	0.033	Grab	5.6	Total (mg/kg).
		Chlorobenzene	108–90–7	0.057	Grab	6.0	Total (mg/kg).
		Chloroform	67–66–3	0.046	Grab	6.0	Total (mg/kg).
		p-Dichlorobenzene	106–46–7	0.09	Grab	NA	NA
		1,2-Dichloroethane	107–06–2	0.21	Grab	6.0	Total (mg/kg).
		Fluorene	86–73–7	0.059	Grab	NA	NA
		Hexachloroethane	67–72–1	0.055	Grab	28	Total (mg/kg).
		Naphthalene	91–20–3	0.059	Grab	5.6	Total (mg/kg).
		Phenanthrene	85–01–8	0.059	Grab	5.6	Total (mg/kg).
		1,2,4,5-Tetrachlorobenzene	95–94–3	0.055	Grab	NA	NA
		Tetrachloroethene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
		1,2,4-Trichlorobenzene	120–82–1	0.055	Grab	19	Total (mg/kg).
		1,1,1-Trichloroethane	71–55–6	0.054	Grab	6.0	Total (mg/kg).
K020		1,2-Dichloroethane	107–06–2	0.21	Grab	6.0	Total (mg/kg)
		1,1,2,2-Tetrachloroethane	79–34–6	0.057	Grab	5.6	Total (mg/kg).
		Tetrachloroethene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
K021		Chloroform	67–66–3	0.046	Composite	6.2	Total (mg/kg)
		Carbon tetrachloride	56–23–5	0.057	Composite	6.2	Total (mg/kg).
		Antimony	7440–36–0	0.60	Composite	0.23	TCLP (mg/l).
K022		Toluene	108–88–3	0.080	Composite	0.034	Total (mg/kg).
		Acetophenone	96–86–2	0.010	Grab	19	Total (mg/kg).
		Diphenylamine	22–39–4	0.52	Composite	NA	NA.
		Diphenylnitrosamine	86–30–6	0.40	Composite	NA	NA.
		Sum of Diphenylamine and Diphenylnitrosamine.	NA	NA	NA	13	Total (mg/kg).
		Phenol	108–95–2	0.039	Grab	12	Total (mg/kg) .

		Chromium (Total)	7440–47–3	0.35	Grab	5.2	TCLP (mg/l).
		Nickel	7440–02–0	0.47	Grab	0.32	TCLP (mg/l).
K023		Phthalic anhydride (measured as Phthalic acid).	85–44–9	0.069	Grab	28	Total (mg/kg).
K024		Phthalic anhydride (measured as Phthalic acid).	85–44–9	0.069	Grab	28	Total (mg/kg).
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	NA	NA	LLEXT fb SSTRP fb CARBN; or INCIN.	NA	INCIN	NA
K026	Stripping still tails from the production of methyl ethyl pyridines.	NA	NA	INCIN	NA	INCIN	NA
K027	Centrifuge and distillation residues from toluene diisocyanate production.	NA	NA	CARBN; or INCIN	NA	FSUBS; or INCIN	NA
K028		1,1-Dichloroethane	75–34–3	0.059	Grab	6.0	Total (mg/kg).
		trans-1,2-Dichloroethane	NA	0.054	Grab	6.0	Total (mg/kg).
		Hexachlorobutadiene	87–68–3	0.055	Grab	5.6	Total (mg/kg).
		Hexachloroethane	67–72–1	0.055	Grab	28	Total (mg/kg).
		Pentachloroethane	76–01–7	NA	NA	5.6	Total (mg/kg).
		1,1,1,2-Tetrachloroethane	630–20–6	0.057	Grab	5.6	Total (mg/kg).
		1,1,2,2-Tetrachloroethane	79–34–6	0.057	Grab	5.6	Total (mg/kg).
		1,1,1-Trichloroethane	71–55–6	0.054	Grab	6.0	Total (mg/kg).
		1,1,2-Trichlorethane	79–00–5	0.054	Grab	6.0	Total (mg/kg).
		Tetrachloroethylene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
		Cadmium	7440–43–9	6.4	Grab	NA	NA.
		Chromium (Total)	7440–47–3	0.35	Grab	0.073	TCLP (mg/l).
		Lead	7439–92–1	0.037	Grab	0.021	TCLP (mg/l).
		Nickel	7440–02–0	0.47	Grab	0.088	TCLP (mg/l)
K029		Chloroform	67–66–3	0.046	Grab	6.0	Total (mg/kg).
		1,2-Dichloroethane	107–06–2	0.21	Grab	6.0	Total (mg/kg).
		1,1,-Dichloroethylene	75–35–4	0.025	Grab	6.0	Total (mg/kg).
		1,1,1-Trichloroethane	71–55–6	0.054	Grab	6.0	Total (mg/kg).
		Vinyl chloride	75–01–4	0.27	Grab	6.0	Total (mg/kg).
K030		o-Dichlorobenzene	95–50–1	0.088	Grab	NA	NA.
		p-Dichlorobenzene	106–46–7	0.09	Grab	NA	NA.
		Hexachlorobutadiene	87–68–3	0.055	Grab	5.6	Total (mg/kg).
		Hexachloroethane	67–72–1	0.055	Grab	28	Total (mg/kg).
		Hexachloropropene	1888–71–7	NA	NA	19	Total (mg/kg).
		Pentachlorobenzene	608–93–5	NA	NA	28	Total (mg/kg).
		Pentachloroethane	76–01–7	NA	NA	5.6	Total (mg/kg).
		1,2,4,5-Tetrachlorobenzene	95–94–3	0.055	Grab	14	Total (mg/kg).
		Tetrachloroethene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
		1,2,4-Trichlorobenzene	120–82–1	0.055	Grab	19	Total (mg/kg).
K031		Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
K032		Hexachloropentadiene	77–47–4	0.057	Composite	2.4	Total (mg/kg).
		Chlordane	57–74–9	0.0033	Composite	0.26	Total (mg/kg).
		Heptachlor	76–44–8	0.0012	Composite	0.066	Total (mg/kg).
		Heptachlor epoxide	1024–57–3	0.016	Composite	0.066	Total (mg/kg).
K033		Hexachlorocyclopentadiene	77–47–4	0.057	Composite	2.4	Total (mg/kg).
K034		Hexachlorocyclopentadiene	77–47–4	0.057	Composite	2.4	Total (mg/kg).
K035		Acenaphthene	83–32–9	NA	NA	3.4	Total (mg/kg).
		Anthracene	120–12–7	NA	NA	3.4	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Composite	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	NA	NA	3.4	Total (mg/kg).
		Chrysene	218–01–9	0.059	Composite	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	NA	NA	3.4	Total (mg/kg).
		Fluoranthene	206–44–0	0.068	Composite	3.4	Total (mg/kg).
		Fluorene	86–73–7	NA	NA	3.4	Total (mg/kg).
		Indeno(1,2,3-cd)pyrene	193–39–5	NA	NA	3.4	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
		Cresols(m- and p-isomers)	NA	0.77	Composite	NA	NA
		Naphthalene	91-20-3	0.059	Composite	3.4	Total (mg/kg).
		o-cresol	95-48-7	0.11	Composite	NA	NA.
		Phenanthrene	85-01-8	0.059	Composite	3.4	Total (mg/kg).
		Phenol	108-95-2	0.039	Composite	NA	NA.
		Pyrene	129-00-0	0.067	Composite	8.2	Total (mg/kg).
K036		Disulfoton	298-04-4	0.026	Composite	0.1	Total (mg/kg).
K037		Disulfoton	298-04-4	0.025	Composite	0.1	Total (mg/kg).
		Toluene	108-88-3	0.080	Composite	28	Total (mg/kg).
K038		Phorate	298-02-2	0.025	Composite	0.1	Total (mg/kg).
K039	Filter cake from the filtration of diethylphosphorodithioc acid in the production of phorate.	NA	NA	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
K040		Phorate	298-02-2	0.025	Composite	0.1	Total (mg/kg).
K041		Toxaphene	8001-35-1	0.0095	Composite	2.6	Total (mg/kg).
K042		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	Composite	4.4	Total (mg/kg).
		o-Dichlorobenzene	95-50-1	0.088	Composite	4.4	Total (mg/kg).
		p-Dichlorobenzene	106-46-7	0.090	Composite	4.4	Total (mg/kg).
		Pentachlorobenzene	608-93-5	0.055	Composite	4.4	Total (mg/kg).
		1,2,4-Trichlorobenzene	120-82-1	0.055	Composite	4.4	Total (mg/kg).
K043		2,4-Dichlorophenol	120-83-2	0.044	Grab	0.36	Total (mg/kg).
		2,6-Dichlorophenol	87-65-0	0.044	Grab	0.34	Total (mg/kg).
		2,4,5-Trichlorophenol	95-95-4	0.18	Grab	8.2	Total (mg/kg).
		2,4,6-Trichlorophenol	88-06-2	0.035	Grab	7.6	Total (mg/kg).
		Tetrachlorophenols (Total)	NA	NA	Grab	0.68	Total (mg/kg).
		Pentachlorophenol	87-86-5	0.089	Grab	1.9	Total (mg/kg).
		Tetrachloroethene	79-01-6	0.056	Grab	1.7	Total (mg/kg).
		Hexachlorodibenzo-p-dioxins	NA	0.000063	Grab	0.001	Total (mg/kg).
		Hexachlorodibenzo-furans	NA	0.000063	Grab	0.001	Total (mg/kg).
		Pentachlorodibenzo-p-dioxins	NA	0.000063	Grab	0.001	Total (mg/kg).
		Pentachlorodibenzofurans	NA	0.000063	Grab	0.001	Total (mg/kg).
		Tetrachlorodibenzo-p-dioxins	NA	0.000063	Grab	0.001	Total (mg/kg).
		Tetrachlorodibenzofurans	NA	0.000063	Grab	0.001	Total (mg/kg).
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	NA	NA	DEACT	NA	DEACT	NA.
K045	Spent carbon from the treatment of wastewater containing explosives.	NA	NA	DEACT	NA	DEACT	NA.
K046		Lead	7439-92-1	0.037	Grab	0.18	TCLP (mg/l).
K047	Pink/red water form TNT operations	NA	NA	DEACT	NA	DEACT	NA.
K048		Benzene	71-43-2	0.14	Composite	14	Total (mg/kg).
		Benzo(a)pyrene	50-32-8	0.061	Composite	12	Total (mg/kg).
		Bis(2-ethylhexyl)phthalate	117-81-7	0.28	Composite	7.3	Total (mg/kg).
		Chrysene	218-01-9	0.059	Composite	15	Total (mg/kg).
		Di-n-butyl phthalate	84-74-2	0.057	Composite	3.6	Total (mg/kg).
		Ethylbenzene	100-41-4	0.057	Composite	14	Total (mg/kg).
		Fluorene	86-73-7	0.059	Composite	NA	NA.
		Naphthalene	91-20-3	0.059	Composite	42	Total (mg/kg).
		Phenanthrene	85-01-8	0.059	Composite	34	Total (mg/kg.
		Phenol	108-95-2	0.039	Composite	3.6	Total (mg/kg).
		Pyrene	129-00-0	0.067	Composite	36	Total (mg/kg).

	Toluene	108–88–33	0.080	Composite	14	Total (mg/kg).
	Xylene(s)	1330–20–7	0.032	Composite	22	Total (mg/kg).
	Cyanides (Total)	57–12–5	0.028	Grab	1.8	Total (mg/kg).
	Chromium (Total)	7440–47–3	0.2	Grab	1.7	TCLP (mg/l).
	Lead	7439–92–1	0.037	Grab	NA	NA.
	Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
K049	Anthracene	120–12–7	0.059	Composite	28	Total (mg/kg).
	Benzene	71–43–2	0.14	Composite	14	Total (mg/kg).
	Benzo(a)pyrene	50–32–8	0.061	Composite	12	Total (mg/kg).
	Bis(2-ethylhexyl)phthalate	117–81–7	0.28	Composite	7.3	Total (mg/kg).
	Carbon disulfide	75–15–0	0.014	Composite	NA	NA.
	Chrysene	2218–01–9	0.059	Composite	15	Total (mg/kg).
	2,4-Dimethylphenol	105–67–9	0.036	Composite	NA	NA.
	Ethylbenzene	100–41–4	0.057	Composite	14	Total (mg/kg).
	Naphthalene	91–20–3	0.059	Composite	42	Total (mg/kg).
	Phenanthrene	85–01–8	0.059	Composite	34	Total (mg/kg).
	Phenol	108–95–2	0.039	Composite	3.6	Total (mg/kg).
	Pyrene	129–00–0	0.067	Composite	36	Total (mg/kg).
	Toluene	108–88–3	0.080	Composite	14	Total (mg/kg).
	Xylene(s)	1330–20–7	0.32	Composite	22	Total (mg/kg).
	Cyanides (Total)	57–12–5	0.028	Grab	1.8	Total (mg/kg).
	Chromium (Total)	7440–47–3	0.2	Grab	1.7	TCLP (mg/l).
	Lead	7439–92–1	0.037	Grab	NA	NA.
	Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
K050	Benzo(a)pyrene	50–32–8	0.061	Composite	12	Total (mg/kg).
	Phenol	108–95–2	0.039	Composite	3.6	Total (mg/kg).
	Cyanides (Total)	57–12–5	0.028	Grab	1.8	Total (mg/kg).
	Chromium (Total)	7440–47–3	0.2	Grab	1.7	TCLP (mg/l).
	Lead	7439–92–1	0.037	Grab	NA	NA.
	Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
K051	Acenaphthene	83–32–9	0.059	Composite	NA	NA.
	Anthracene	120–12–7	0.059	Composite	28	Total (mg/kg).
	Benzene	71–43–2	0.14	Composite	14	Total (mg/kg).
	Benzo(a) anthracene	56–55–3	0.059	Composite	20	Total (mg/kg).
	Benzo(a)pyrene	50–32–8	0.061	Composite	12	Total (mg/kg).
	Bis(2-ethylhexyl)- phthalate	117–81–7	0.28	Composite	7.3	Total (mg/kg).
	Chrysene	2218–01–9	0.059	Composite	15	Total (mg/kg).
	Di-n-butyl phthalate	105–67–9	0.057	Composite	3.6	Total (mg/kg).
	Ethylbenzene	100–41–4	0.057	Composite	14	Total (mg/kg).
	Fluorene	86–73–7	0.059	Composite	NA	NA.
	Naphthalene	91–20–3	0.059	Composite	42	Total (mg/kg).
	Phenanthrene	85–01–8	0.059	Composite	34	Total (mg/kg).
	Phenol	108–95–2	0.039	Composite	3.6	Total (mg/kg).
	Pyrene	129–00–0	0.067	Composite	36	Total (mg/kg).
	Toluene	108–88–3	0.080	Composite	14	Total (mg/kg).
	Xylene(s)	1330–20–7	0.32	Composite	22	Total (mg/kg).
	Cyanides (Total)	57–12–5	0.028	Grab	1.8	Total (mg/kg).
	Chromium (Total)	7440–47–3	0.2	Grab	1.7	TCLP (mg/l).
	Lead	7439–92–1	0.037	Grab	NA	NA.
	Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
K052	Benzene	71–43–2	0.14	Composite	14	Total (mg/kg).
	Benzo(a)pyrene	50–32–8	0.061	Composite	12	Total (mg/kg).
	o-Cresol	95–48–7	0.011	Composite	6.2	Total (mg/kg).
	p-Cresol	106–44–5	0.77	Composite	6.2	Total (mg/kg).
	2,4,-Dimethylphenol	105–67–9	0.036	Composite	NA	NA.
	Ethylbenzene	100–41–4	0.057	Composite	14	Total (mg/kg).
	Naphthalene	91–20–3	0.059	Composite	42	Total (mg/kg).
	Phenanthrene	85–01–8	0.059	Composite	34	Total (mg/kg).
	Phenol	108–95–2	0.039	Composite	3.6	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
		Toluene	108–88–3	0.080	Composite	14	Total (mg/kg).
		Xylene(s)	1330–20–7	0.32	Composite	22	Total (mg/kg).
		Cyanides (Total)	57–12–5	0.028	Grab	1.8	Total (mg/kg).
		Chromium (Total)	7440–47–3	0.2	Grab	1.7	TCLP (mg/l).
		Lead	7439–92–1	0.037	Grab	NA	NA.
		Nickel	7440–02–0	NA	NA	0.20	TCLP (mg/l).
K060		Benzene	71–43–2	0.17	Composite	0.071	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.035	Composite	3.6	Total (mg/kg).
		Naphthalene	91–20–3	0.028	Composite	3.4	Total (mg/kg).
		Phenol	108–95–2	0.042	Composite	3.4	Total (mg/kg).
		Cyanides (Total)	57–12–5	1.9	Grab	1.2	Total (mg/kg).
K061		Antimony	7440–36–0	NA	NA	2.1	TCLP (mg/l).
		Arsenic	7440–38–2	NA	NA	0.055	TCLP (mg/l).
		Barium	7440–39–3	NA	NA	7.6	TCLP (mg/l).
		Beryllium	7440–41–7	NA	NA	0.014	TCLP (mg/l).
		Cadmium	7440–43–9	1.61	Grab	0.19	TCLP (mg/l).
		Chromium (Total)	7440–47–3	0.32	Grab	0.33	TCLP (mg/l).
		Lead	7439–92–1	0.51	Grab	0.37	TCLP (mg/l).
		Mercury	7439–97–6	NA	NA	0.009	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	5.0	TCLP (mg/l).
		Selenium	7782–49–2	NA	NA	0.16	TCLP (mg/l).
		Silver	7440–22–4	NA	NA	0.3	TCLP (mg/l).
		Thallium	7440–28–0	NA	NA	0.078	TCLP (mg/l).
		Zinc	7440–66–6	NA	NA	5.3	TCLP (mg/l).
K062		Chromium (Total)	7440–47–3	0.32	Grab	0.094	TCLP (mg/l).
		Lead	7439–92–1	0.04	Grab	0.37	TCLP (mg/l).
		Nickel	7440–02–0	0.44	Grab	NA	NA.
K069	Calcium Sulfate Subcategory	Cadmium	7440–43–9	1.6	Grab	0.14	TCLP (mg/l).
		Lead	7439–92–1	0.51	Grab	0.24	TCLP (mg/l).
K069	Emission control dust/sludge from secondary lead smelting: Non-Calcium Sulfate Subcategory.	NA	NA	NA	NA	RLEAD	NA.
K071		Mercury	7439–97–6	0.030	Grab	0.025	TCLP (mg/l).
K073		Carbon tetrachloride	56–23–5	0.057	Composite	6.2	Total (mg/kg).
		Chloroform	67–66–3	0.046	Composite	6.2	Total (mg/kg).
		Hexachloroethane	67–72–1	0.055	Composite	30	Total (mg/kg).
		Tetrachloroethene	127–18–4	0.056	Composite	6.2	Total (mg/kg).
		1,1,1-Trichloroethane	71–55–6	0.054	Composite	6.2	Total (mg/kg).
K083		Benzene	71–43–2	0.14	Composite	6.6	Total (mg/kg).
		Aniline	62–53–3	0.81	Composite	14	Total (mg/kg).
		Diphenylamine	22–39–4	0.52	Composite	NA	NA.
		Diphenylnitrosamine	86–30–6	0.40	Composite	NA	NA
		Sum of Diphenylamine and Diphenylnitrosamine.	NA	NA	NA	14	Total (mg/kg).
		Nitrobenzene	98–95–3	0.068	Composite	14	Total (mg/kg).
		Phenol	108–95–2	0.039	Grab	5.6	Total (mg/kg).
		Cyclohexanone	108–94–1	0.36	Grab	NA	NA.
		Nickel	7440–02–0	0.47	Grab	0.088	TCLP (mg/l).
K084		Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
K085		Benzene	71–43–2	0.14	Composite	4.4	Total (mg/kg).
		Chlorobenzene	108–90–7	0.057	Composite	4.4	Total (mg/kg).

		o-Dichlorobenzene	95–50–1	0.088	Composite	4.4	Total (mg/kg).
		m-Dichlorobenzene	541–73–1	0.036	Composite	4.4	Total (mg/kg).
		p-Dichlorobenzene	106–46–7	0.090	Composite	4.4	Total (mg/kg).
		1,2,4,-Trichlorobenzene	120–82–1	0.055	Composite	4.4	Total (mg/kg).
		1,2,4,5-Tetrachlorobenzene	95–94–3	0.055	Composite	4.4	Total (mg/kg).
		Pentachlorobenzene	608–93–5	0.055	Composite	4.4	Total (mg/kg).
		Hexachlorobenzene	118–74–1	0.055	Composite	4.4	Total (mg/kg).
		Aroclor 1016	12674–11–2	0.013	Composite	0.92	Total (mg/kg).
		Aroclor 1221	11104–28–2	0.014	Composite	0.92	Total (mg/kg).
		Aroclor 1232	11141–16–5	0.013	Composite	0.92	Total (mg/kg).
		Aroclor 1242	53469–21–9	0.017	Composite	0.92	Total (mg/kg).
		Aroclor 1248	12672–29–6	0.013	Composite	0.92	Total (mg/kg).
		Aroclor 1254	11097–69–1	0.014	Composite	1.8	Total (mg/kg).
		Aroclor 1260	11096–82–5	0.014	Composite	1.8	Total (mg/kg).
K086		Acetone	67–64–1	0.28	Grab	160	Total (mg/kg).
		Acetophenone	96–86–2	0.010	Grab	9.7	Total (mg/kg).
		Bis(2-ethylhexyl)phthalate	117–81–7	0.28	Composite	28	Total (mg/kg).
		n-Butyl alcohol	71–36–3	5.6	Grab	2.6	Total (mg/kg).
		Butylbenzylphthalate	85–68–7	0.017	Composite	7.9	Total (mg/kg).
		Cyclohexanone	108–94–1	0.36	Grab	NA	NA.
		1,2-Dichlorobenzene	95–50–1	0.088	Grab	6.2	Total (mg/kg).
		Diethyl phthalate	84–66–2	0.20	Composite	28	Total (mg/kg).
		Dimethyl phthalate	131–11–3	0.047	Composite	28	Total (mg/kg).
		Di-n-butyl phthalate	84–74–2	0.057	Composite	28	Total (mg/kg).
		Di-n-octyl phthalate	117–84–0	0.017	Composite	28	Total (mg/kg).
		Ethyl acetate	141–78–6	0.34	Composite	33	Total (mg/kg).
		Ethylbenzene	100–41–4	0.057	Composite	6.0	Total (mg/kg).
		Methanol	67–56–1	5.6	Composite	NA	NA.
		Methyl isobutyl ketone	108–10–1	0.14	Grab	33	Total (mg/kg).
		Methyl ethyl ketone	78–93–3	0.28	Grab	36	Total (mg/kg).
		Methylene chloride	75–09–2	0.089	Composite	33	Total (mg/kg).
		Naphthalene	91–20–3	0.059	Composite	3.1	Total (mg/kg).
		Nitrobenzene	98–95–3	0.068	Composite	14	Total (mg/kg).
		Toluene	108–88–3	0.080	Composite	28	Total (mg/kg).
		1,1,1-Trichloroethane	71–55–6	0.054	Composite	5.6	Total (mg/kg).
		Trichloroethylene	79–01–6	0.054	Composite	5.6	Total (mg/kg).
		Xylenes (Total)	1330–20–7	0.32	Composite	28	Total (mg/kg).
		Cyanides (Total)	57–12–5	1.2	Grab	1.5	Total (mg/kg).
		Chromium (Total)	7440–47–3	0.32	Grab	0.094	TCLP (mg/l).
		Lead	7439–92–1	0.037	Grab	0.37	TCLP (mg/l).
K087		Acenaphthalene	208–96–8	0.059	Composite	3.4	Total (mg/kg).
		Benzene	71–43–2	0.14	Composite	0.071	Total (mg/kg).
		Chrysene	218–01–9	0.059	Composite	3.4	Total (mg/kg).
		Fluoranthene	206–44–0	0.068	Composite	3.4	Total (mg/kg).
		Indeno(1,2,3-cd)pyrene	193–39–5	0.0055	Composite	3.4	Total (mg/kg).
		Naphthalene	91–20–3	0.059	Composite	3.4	Total (mg/kg).
		Phenanthrene	85–01–8	0.059	Composite	3.4	Total (mg/kg).
		Toluene	108–88–3	0.06	Composite	0.65	Total (mg/kg).
		Xylene(s)	1330–20–7	0.32	Composite	0.07	Total (mg/kg).
		Lead	7439–92–1	0.037	Grab	0.51	TCLP (mg/l).
K093		Phthalic anhydride (measured as Phthalic acid).	85–44–9	0.069	Grab	28	Total (mg/kg).
K094		Phthalic anhydride (measured as Phthalic acid).	85–44–9	0.069	Grab	28	Total (mg/kg).
K095		1,1,1,2-Tetrachloroethane	630–20–6	0.057	Grab	5.6	Total (mg/kg).
		1,1,2,2-Tetrachloroethane	79–34–6	0.057	Grab	5.6	Total (mg/kg).
		Tetrachloroethene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
		1,1,2-Trichloroethane	79–00–5	0.054	Grab	6.0	Total (mg/kg).
		Trichloroethylene	79–01–6	0.054	Grab	5.6	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
		Hexachloroethane	67–72–1	0.055	Grab	28	Total (mg/kg).
		Pentachloroethane	76–01–7	0.055	Grab	5.6	Total (mg/kg).
K096		1,1,1,2-Tetrachloroethane	630–20–6	0.057	Grab	5.6	Total (mg/kg).
		1,1,2,2-Tetrachloroethane	79–34–6	0.057	Grab	5.6	Total (mg/kg).
		Tetrachloroethene	127–18–4	0.056	Grab	6.0	Total (mg/kg).
		1,1,2-Trichloroethane	79–00–5	0.054	Grab	6.0	Total (mg/kg).
		Trichloroethene	79–01–6	0.054	Grab	5.6	Total (mg/kg).
		1,3-Dichlorobenzene	541–73–1	0.036	Grab	5.6	Total (mg/kg).
		Pentachloroethane	76–01–7	0.055	Grab	5.6	Total (mg/kg).
		1,2,4-Trichlorobenzene	120–82–1	0.055	Grab	19	Total (mg/kg).
K097		Hexachlorocyclopentadiene	77–47–4	0.057	Composite	2.4	Total (mg/kg).
		Chlordane	57–74–9	0.0033	Composite	0.26	Total (mg/kg).
		Heptachlor	76–44–8	0.0012	Composite	0.066	Total (mg/kg).
		Heptachlor epoxide	1024–57–3	0.016	Composite	0.066	Total (mg/kg).
K098		Toxaphene	8001–35–1	0.0095	Composite	2.6	Total (mg/kg).
K099		2,4-Dichlorophenoxyacetic acid	94–75–7	1.0	Grab	1.0	Total (mg/kg).
		Hexachlorodibenzo-p-dioxins	NA	0.001	Grab	0.001	Total (mg/kg).
		Hexachlorodibenzo-furans	NA	0.001	Grab	0.001	Total (mg/kg).
		Pentachlorodibenzo-p-dioxins	NA	0.001	Grab	0.001	Total (mg/kg).
		Pentachlorodibenzo-furans	NA	0.001	Grab	0.001	Total (mg/kg).
		Tetrachlorodibenzo-p-dioxins	1746–01–6	0.001	Grab	0.001	Total (mg/kg).
		Tetrachlorodibenzo-furans	NA	0.001	Grab	0.001	Total (mg/kg).
K100		Cadmium	7440–43–9	1.6	Grab	0.066	TCLP (mg/l).
		Chromium (Total)	7440–47–3	0.32	Grab	5.2	TCLP (mg/l).
		Lead	7439–92–1	0.51	Grab	0.51	TCLP (mg/l).
K101		o-Nitroaniline	NA	0.27	Grab	14	Total (mg/kg).
		Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
		Cadmium	7440–43–9	0.24	Grab	NA	NA.
		Lead	7439–92–1	0.17	Grab	NA	NA.
		Mercury	7439–97–6	0.082	Grab	NA	NA.
K102		o-Nitrophenol	88–75–5	0.028	Grab	13	Total (mg/kg).
		Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
		Cadmium	7440–43–9	0.24	Grab	NA	NA.
		Lead	7439–92–1	0.17	Grab	NA	NA.
		Mercury	7439–97–6	0.082	Grab	NA	NA.
K103		Aniline	62–53–3	4.5	Grab	5.6	Total (mg/kg).
		Benzene	71–43–2	0.15	Grab	6.0	Total (mg/kg).
		2,4-Dinitrophenol	51–28–5	0.61	Grab	5.6	Total (mg/kg).
		Nitrobenzene	98–95–3	0.073	Grab	5.6	Total (mg/kg).
		Phenol	108–95–2	1.4	Grab	5.6	Total (mg/kg).
K104		Aniline	62–53–3	4.5	Grab	5.6	Total (mg/kg).
		Benzene	71–43–2	0.15	Grab	6.0	Total (mg/kg).
		2,4-Dinitrophenol	51–28–5	0.61	Grab	5.6	Total (mg/kg).
		Nitrobenzene	98–95–3	0.073	Grab	5.6	Total (mg/kg).
		Phenol	108–95–2	1.4	Grab	5.6	Total (mg/kg).
		Cyanides (Total)	57–12–5	2.7	Grab	1.8	Total (mg/kg).
K105		Benzene	71–43–2	0.14	Grab	4.4	Total (mg/kg).
		Chlorobenzene	108–90–7	0.057	Grab	4.4	Total (mg/kg).
		o-Dichlorobenzene	95–50–1	0.088	Grab	4.4	Total (mg/kg).
		p-Dichlorobenzene	106–46–7	0.090	Grab	4.4	Total (mg/kg).
		2,4,5-Trichlorophenol	95–95–4	0.18	Grab	4.4	Total (mg/kg).

		2,4,6-Trichlorophenol	88–06–2	0.035	Grab	4.4	Total (mg/kg).
		2—Chlorophenol	95–57–8	0.044	Grab	4.4	Total (mg/kg).
		Phenol	108–95–2	0.039	Grab	4.4	Total (mg/kg).
K106	Low Mercury Subcategory—less than 260 mg/kg Mercury—residues from RMERC.	Mercury	7439–97–6	0.030	Grab	0.20	TCLP (mg/l).
K106	Low Mercury Subcategory—less than 260 mg/kg Mercury—that are not residues from RMERC.	Mercury	7439–97–6	0.030	Grab	0.025	TCLP (mg/l).
K106	Wastewater treatment sludge from the mercury cell process in chlorine production: (High Mercury Subcategory—greater than or equal to 260 mg/kg total mercury).	NA	NA	NA	NA	RMERC	NA.
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) form carboxylic acid hydrazides.	NA	NA	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN.	NA	INCIN	NA.
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN.	NA	INCIN	NA.
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN.	NA	INCIN	NA.
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	NA	NA	INCIN; or CHOXD fb, CARBN; or BOIDG fb CARBN.	NA	INCIN	NA.
K111		2,4-Dinitrotoluene	121–1–2	0.32	Grab	140	Total (mg/kg).
		2,6-Dinitrotoluene	606–20–2	0.55	Grab	28	Total (mg/kg).
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	INCIN; or CHOXD fb, CARBN; or BIODG fb CARBN.	NA	INCIN	NA.
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CARBN; OR INCIN.	NA	FSUBS; or INCIN	NA.
K114	Vicinals from the purification of toluenediame in the production of toluenediamine via hydrogenation of dinitrotolune.	NA	NA	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
K115		Nickel	7440–02–0	0.47	Grab	0.32	TCLP (mg/l).
K115	Heavy ends from the purification of toluenediame in the production of toluenediamine via hydrogenation of dinitrotoluene.	NA	NA	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	NA	NA	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
K117		Ethylene dibromide	106–93–4	0.028	Grab	15	Total (mg/kg).
		Methyl bromide	74–83–9	0.11	Grab	15	Total (mg/kg).
		Chloroform	67–66–3	0.046	Grab	5.6	Total (mg/kg).
K118		Ethylene dibromide	106–93–4	0.028	Grab	15	Total (mg/kg).
		Methyl bromide	74–83–9	0.11	Grab	15	Total (mg/kg).
		Chloroform	67–66–3	0.046	Grab	5.6	Total (mg/kg).
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	INCIN; or CHOXD fb (BIODG or CARBN).	NA	INCIN	NA.
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	INCIN; or CHOXD fb (BIODG or CARBN).	NA	INCIN	NA.
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	NA	NA	INCIN; or CHOXD fb (BIODG or CARBN).	NA	INCIN	NA.
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylene bisdithiocarbamic acid and its salts.	NA	NA	INCIN; or CHOXD fb (BIODG or CARBN).	NA	INCIN	NA.
K131		Methyl bromide	74–83–9	0.11	Grab	15	Total (mg/kg).
K132		Methyl bromide	74–83–9	0.11	Grab	15	Total (mg/kg).
K136		Ethylene dibromide	106–93–4	0.028	Grab	15	Total (mg/kg).
		Methyl bromide	74–83–9	0.11	Grab	15	Total (mg/kg).
		Chloroform	67–66–3	0.046	Grab	5.6	Total (mg/kg).
K141	Process related from the recovery of coal tar, including, but not limited to, tar collecting sump residues from the production of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).	Benzene	71–43–2	0.14	Grab	10	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).
		Benzo(b) fluoranthene	205–99–2	0.11	Grab	6.8	Total (mg/kg).
		Benzo(k) fluoranthene	207–08–9	0.11	Grab	6.8	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	0.055	Grab	8.2	Total (mg/kg).
		Indeno(1,2,3-cd)pyrene	193–39–5	0.0055	Grab	3.4	Total (mg/kg).
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products producted from coal.	Benzene	71–43–2	0.14	Grab	10	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).

		Benzo(b)fluoranthene	205–99–2	0.11	Grab	6.8	Total (mg/kg).
		Benzo(k)fluoranthene	207–08–9	0.11	Grab	6.8	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	0.055	Grab	8.2	Total (mg/kg).
		Indeno(1,2,3-cd)pyrene	193–39–5	0.0055	Grab	3.4	Total (mg/kg).
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	Benzene	71–43–2	0.14	Grab	10	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).
		Benzo(b)fluoranthene	205–99–2	0.11	Grab	6.8	Total (mg/kg).
		Benzo(k)flouranthene	207–08–9	0.11	Grab	6.8	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	Benzene	71–43–2	0.14	Grab	10	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).
		Benzo(b)fluoranthene	205–99–2	0.11	Grab	6.8	Total (mg/kg).
		Benzo(k)fluoranthene	207–08–9	0.11	Grab	6.8	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	0.055	Grab	8.2	Total (mg/kg).
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	Benzene	71–43–2	0.14	Grab	10	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	0.055	Grab	8.2	Total (mg/kg).
		Naphthalene	91–20–3	0.059	Grab	5.6	Total (mg/kg).
K147	Tar storage tank residues from coal tar refining.	Benzene	71–43–2	0.14	Grab	10	Total (mg/kg).
		Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).
		Benzo(b)fluoranthene	205–99–2	0.11	Grab	6.8	Total (mg/kg).
		Benzo(k)fluoranthene	207–08–9	0.11	Grab	6.8	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	0.055	Grab	8.2	Total (mg/kg).
		Indeno(1,2,3-cd)pyrene	193–39–5	0.0055	Grab	3.4	Total (mg/kg).
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	Benz(a)anthracene	56–55–3	0.059	Grab	3.4	Total (mg/kg).
		Benzo(a)pyrene	50–32–8	0.061	Grab	3.4	Total (mg/kg).
		Benzo(b)fluoranthene	205–99–2	0.11	Grab	6.8	Total (mg/kg).
		Benzo(k)fluoranthene	207–08–9	0.11	Grab	6.8	Total (mg/kg).
		Chrysene	218–01–9	0.059	Grab	3.4	Total (mg/kg).
		Dibenz(a,h)anthracene	53–70–3	0.055	Grab	8.2	Total (mg/kg).
		Indeno(1,2,3-cd)pyrene	193–39–5	0.0055	Grab	3.4	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
K149	Distillation of fractionation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillations of benzyl chloride.).	Chloroform	67-66-3	0.046	Grab	6.0	Total (mg/kg).
		Chloromethane	74-87-3	0.19	Grab	30	Total (mg/kg).
		Chlorobenzene	108-90-7	0.057	Grab	6.0	Total (mg/kg).
		1,4-Dichlorobenzene	106-46-7	0.090	Grab	6.0	Total (mg/kg).
		Hexachlorobenzene	118-74-1	0.055	Grab	10	Total (mg/kg).
		Pentachlorobenzene	608-93-5	0.055	Grab	10	Total (mg/kg).
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	Grab	14	Total (mg/kg).
		Toluene	108-88-3	0.080	Grab	10	Total (mg/kg).
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	Carbon tetrachloride	56-23-5	0.057	Grab	6.0	Total (mg/kg).
		Chloroform	67-66-3	0.046	Grab	6.0	Total (mg/kg).
		Chloromethane	74-87-3	0.19	Grab	30	Total (mg/kg).
		1,4-Dichlorobenzene	106-46-7	0.090	Grab	6.0	Total (mg/kg).
		Hexachlorobenzene	118-74-1	0.055	Grab	10	Total (mg/kg).
		Pentachloroben-zene	608-93-5	0.055	Grab	10	Total (mg/kg).
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	Grab	14	Total (mg/kg).
		1,1,2,2-Tetra-chlortheane	79-34-5	0.057	Grab	6.0	Total (mg/kg).
		Tetrachloroethylene	127-18-4	0.056	Grab	6.0	Total (mg/kg).
		1,2,4-Trichlorobenzene	120-82-1	0.055	Grab	19	Total (mg/kg).
K151	Wastewater treatment sludge, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	Benzene	71-43-2	0.14	Grab	10	Total (mg/kg).
		Carbon tetrachloride	56-23-5	0.057	Grab	6.0	Total (mg/kg).
		Chloroform	67-66-3	0.046	Grab	6.0	Total (mg/kg).
		Hexachlorobenzene	118-74-1	0.055	Grab	10	Total (mg/kg).
		Pentachlorobenzene	608-93-5	0.055	Grab	10	Total (mg/kg).
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	Grab	14	Total (mg/kg).
		Tetrachloroethylene	127-18-4	0.056	Grab	6.0	Total (mg/kg).

		Toluene	108–88–3	0.080	Grab	10	Total (mg/kg).
P001	Warfarin (>0.3%)	Warfarin	81–81–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
P002	1-Acetyl-2- thiourea	1-Acetyl-2-thiourea	591–08–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P003	Acrolein	Acrolein	107–02–8	0.29	Composite	FSUBS; or INCIN	NA.
P004	Aldrin	Aldrin	309–00–2	0.021	Composite	0.066	Total (mg/kg).
P005	Allyl alcohol	Allyl alcohol	107–18–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
P006	Aluminum phosphide	Aluminum phosphide	20859–73–8	CHOXD; CHRED; or INCIN.	NA	CHOXD; CHRED; or INCIN.	NA.
P007	5-Aminoethyl 3-isoxazolol	5-Aminoethyl 3-isoxazolol	2763–96–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P008	4-Aminopyridine	4-Aminopyridine	504–24–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P009	Ammonium picrate	Ammonium picrate	131–74–8	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
P010	Arsenic acid	Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
P011	Arsenic pentoxide	Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
P012	Arsenic trioxide	Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
P013	Barium cyanide	Barium	7440–39–3	NA	NA	52	TCLP (mg/l).
		Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
P014	Thiophenol (Benzene thiol)	Thiophenol (Benzene thiol)	108–98–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P015	Beryllium dust	Beryllium dust	7440–41–7	NA	NA	RMETL; or RTHRM..	NA.
P016	Bis(chloromethyl)ether	Bis(chloromethyl) ether	542–88–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P017	Bromoacetone	Bromoacetone	598–31–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P018	Brucine	Brucine	357–57–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P020	2-sec-Butyl-4,6-dinitrophenol (Dinoseb).	2-sec-Butyl-4,6-dinitrophenol (Dinoseb).	88–85–7	0.066	Grab	2.5	Total (mg/kg).
P021	Calcium cyanide	Cyanides (Total)	57–12–5	1.9	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
P022	Carbon disulfide	Carbon disulfide	75–15–0	0.014	GRAB	INCIN	NA.

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
P023	Chloroacetaldehyde	Chloroacetaldehyde	107–20–0	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P024	p-Chloroaniline	p-Chloroaniline	106–47–8	0.46	Grab	16	Total (mg/kg).
P026	1-(o-Chlorophenyl) thiourea	1-(o-Chlorophenyl) thiourea	5344–82–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P027	3-Chloropropionitrile	3-Chloropropionitrile	542–76–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P028	Benzyl chloride	Benzylchloride	100–44–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P029	Copper cyanide	Cyanides (Total)	57–12–5	1.9	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
P030	Cyanides (soluble salts and complexes).	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
P031	Cyanogen	Cyanogen	460–19–5	CHOXD; WETOX; or INCIN.	NA	CHOXD; WETOX; or INCIN.	NA.
P033	Cyanogen chloride	Cyanogen chloride	506–77–4	CHOXD; WETOX; or INCIN.	NA	CHOXD; WETOX; or INCIN.	NA.
P034	2-Cyclohexyl-4,6-dinitrophenol	2-Cyclohexyl-4,6-dinitrophenol	131–89–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P036	Dichlorophenylarsine	Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
P037	Dieldrin	Dieldrin	60–57–1	0.017	Composite	0.13	Total (mg/kg)
P038	Diethylarsine	Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
P039	Disulfoton	Disulfoton	298–04–4	0.017	Grab	0.1	Total (mg/kg).
P040	0,0-Diethyl O-pyrazinyl phosphorothioate.	0,0-Diethyl O-pyrazinyl phosphorothioate.	297–97–2	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
P041	Diethyl-p-nitrophenyl phosphate	Diethyl-p-nitrophenyl phosphate	311–45–5	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
P042	Epinephrine	Epinephrine	51–43–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P043	Diisopropylfluorophosphate (DFP)	Diisopropylfluoro' phosphate (DFP)	55–91–4	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
P044	Dimethoate	Dimethoate	60–51–5	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
P045	Thiofanox	Thiofanox	39196–18–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.

P046	alpha, alpha-Dimethylphenethylamine.	alpha, alpha-Dimethylphenethylamine.	122–09–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P047	4,6-Dinitro-o-cresol	4,6-Dinitro-o-cresol	534–52–1	0.28	Composite	160	Total (mg/kg).
		4,6-Dinitro-o-cresol salts	534–52–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P048	2,4-Dinitrophenol	2,4-Dinitrophenol	151–28–5	0.12	Composite	160	Total (mg/kg).
P049	2,4-Dithiobiuret	2,4-Dithiobiuret	541–53–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P050	Endosulfan	Endosulfan I	939–98–8	0.023	Composite	0.066	Total (mg/kg).
		Endosulfan I	33213–6–5	0.029	Composite	0.13	Total (mg/kg).
		Endosulfan sulfate	1031–07–8	0.029	Composite	0.13	Total (mg/kg).
P051	Endrin	Endrin	72–20–8	0.0028	Composite	0.13	Total (mg/kg).
		Endrin aldehyde	7421–93–4	0.025	Composite	0.13	Total (mg/kg).
P054	Aziridine	Aziridine	151–56–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P056	Fluoride	Fluoride	16964–48–8	35	Grab	NA	NA.
		Fluorine	7782–41–4	NA	NA	ADGAS fb NEUTR.	NA.
P057	Fluoroacetamide	Fluoroacetamide	640–19–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P058	Fluoroacetic acid, sodium salt	Fluoroacetic acid, sodium salt	62–74–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P059	Heptachlor	Heptachlor	76–44–8	0.0012	Composite	0.066	Total (mg/kg).
		Heptachlor epoxide	1024–57–3	0.016	Composite	0.066	Total (mg/kg).
P060	Isodrin	Isodrin	465–73–6	0.021	Composite	0.066	Total (mg/kg).
P062	Hexaethyltetraphosphate	Hexaethyltetra- phosphate	757–58–4	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
P063	Hydrogen cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg)
		Cyanides (Amenable)	57–12–5	0.10	Grab	9.1	Total (mg/kg)
P064	Isocyanic acid, ethyl ester	Isocyanic acid, ethyl ester	624–83–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P065	Low Mercury Subcategory-less than 260 mg/kg Mercury-residues from RMERC-Mercury fulminate.	Mercury	7439–97–6	0.030	Grab	0.20	TCLP (mg/l).
P065	Low Mercury Subcategory-less than 260 mg/kg Mercury-incinerator residues(and are not residues from RMERC)-Mercury fulminate.	Mercury	7439–97–6	0.030	Grab	0.025	TCLP (mg/l).
P065	Mercury fulminate: (High mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-either incinerator residues or residues from RMERC)..	Mercury Fulminate	628–86–4	NA	NA	RMERC	NA.

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
	P065Mercury fulminate: (All nonwastewaters that are not incinerator residues from RMERC; regardless of Mercury Content).	Mercury Fulminate	628–86–4	NA	NA	IMERC	NA.
P066	Methomyl	Methomyl	116752–77–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P067	2-Methylaziridine	2-Methylaziridine	75–55–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P068	Methyl hydrazine	Methyl hydrazine	60–34–4	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
P069	Methyllactonitrile	Methyllactonitrile	75–86–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P070	Aldicarb	Aldicarb	116–06–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P071	Methyl parathion	Methyl parathion	298–00–0	0.025	Grab	0.1	Total (mg/kg).
P072	1-Naphthyl-2-thiourea	1–Naphthyl-2-thiourea	86–88–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P073	Nickel carbonyl	Nickel	7440–02–0	0.32	Grab	0.32	TCLP (mg/l).
P074	Nickel cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.10	Grab	9.1	Total (mg/kg).
		Nickel	7440–02–0	0.44	Grab	0.32	TCLP (mg/l).
P075	Nicotine and salts	Nicotine and salts	54–11–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P076	Nitric oxide	Nitric oxide	10102–43–9	ADGAS	NA	ADGAS	NA.
P077	p-Nitroaniline	p-Nitroaniline	100–01–6	0.028	Composite	28	Total (mg/kg).
P078	Nitrogen dioxide	Nitrogen dioxide	10102–44–0	ADGAS	NA	ADGAS	NA.
P081	Nitroglycerin	Nitroglycerin	55–63–0	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
P082	N-Nitrosodimethylamine	N-Nitrosodimethylamine	62–75–9	0.40	Composite	INCIN	NA.
P084	N-Nitrosomethylvinylamine	N-Nitrosomethylvinylamine	4549–40–0	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P085	Octamethylpyrophosphoramide	Octamethylpyrophosphoramide	152–16–9	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.

P087	Osmium tetroxide	Osmium tetroxide	20816–12–0	NA	NA	RMETL; or RTHRM.	NA.
P088	Endothall	Endothall	145–73–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
P089		Parathion	56–38–2	0.025	Grab	0.1	Total (mg/kg).
P092	Low Mercury subcategory-less than 260 mg/kg Mercury residues from RMERC-Phenyl mercury acetate.	Mercury	7439–97–6	0.030	Grab	0.20	TCLP (mg/l).
P092	Low Mercury Subcategory-less than 260 mg/kg Mercury-incinerator residues (and are not residues from RMERC)-Phenyl mercury acetate.	Mercury	7439–97–6	0.030	Grab	0.025	TCLP (mg/l).
P092	Phenyl mercury acetate: (High Mercury Subcategory-greater than or equal to 260 mg/kg total Mercury-either incinerator residues or residues from RMERC).	Phenyl mercury acetate	62–38–4	NA	NA	RMERC	NA.
P092	Phenyl mercury acetate: (All nonwastewaters that are not incinerator residues and are not residues from RMERC: regardless of Mercury Content).	Phenyl mercury acetate	62–38–4	NA	NA	IMERC; or RMERC.	NA.
P093	N-Phenylthiouea	N-Phenylthiouea	103–85–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P094	Phorate	Phorate	298–02–2	0.025	Grab	0.1	Total (mg/kg).
P095	Phosgene	Phosgene	75–44–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P096	Phosphine	Phosphine	7803–51–2	CHOXD; CHRED; or INCIN.	NA	CHOXD; CHRED; or INCIN.	NA.
P097	Famphur	Famphur	52–85–7	0.025	Grab	0.1	Total (mg/kg).
P098	Potassium cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.10	Grab	9.1	Total (mg/kg).
P099	Potassium silver cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.1	Grab	9.1	Total (mg/kg).
		Silver	7440–22–4	0.29	Grab	0.072	TCLP (mg/l).
P101	Ethyl cyanide (Propanenitrile)	Ethyl cyanide (Propanenitrile)	107–12–0	0.24	Composite	360	Total (mg/kg).
P102	Propargyl alcohol	Propargyl alcohol	107–19–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
P103	Selenourea	Selenium	7782–49–2	1.0	Composite	5.7	TCLP (mg/l).
P104	Silver cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.10	Grab	9.1	Total (mg/kg).
		Silver	7440–22–4	0.29	Grab	0.072	TCLP (mg/l).
P105	Sodium azide	Sodium azide	26628–22–8	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
P106	Sodium cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.10	Grab	9.1	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
P108	Strychnine and salts	Strychnine and salts	57–24–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P109	Tetraethyldithiopyrophosphate	Tetraethyldithiopyrophosphate	3689–24–5	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
P110	Tetraethyl lead	Lead	7439–92–1	0.040	Grab	0.51	TCLP (mg/l).
P112	Tetranitromethane	Tetranitromethane	509–14–8	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
P113	Thallic oxide	Thallium	7440–28–0	0.14	Composite	NA	NA.
		Thallic oxide	1314–32–5	NA	NA	RTHRM; or STABL.	NA.
P114	Thallium selenite	Selenium	7782–49–2	1.0	Grab	5.7	TCLP (mg/l).
P115	Thallium (I) sulfate	Thallium	7440–28–0	0.14	Composite	NA	NA.
		Thallium (I) sulfate	7446–18–6	NA	NA	RTHRM; or STABL.	NA.
P116	Thiosemicarbazide	Thiosemicarbazide	79–19–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P118	Trichloromethanethiol	Trichloro methanethiol	75–70–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
P119	Ammonia vanadate	Vanadium	7440–62–2	28	Composite	NA	NA.
		Ammonium vandate	7803–55–6	NA	NA	STABL	NA.
P120	Vanadium pentoxide	Vanadium	7440–62–2	28	Composite	NA	NA.
		Vanadium pentoxide	1314–62–1	NA	NA	STABL	NA.
P121	Zinc cyanide	Cyanides (Total)	57–12–5	1.2	Grab	110	Total (mg/kg).
		Cyanides (Amenable)	57–12–5	0.10	Grab	9.1	Total (mg/kg).
P122	Zinc Phosphide (<10%)	Zinc Phosphide (<10%)	1314–84–7	CHOXD; CHRED; or INCIN.	NA	CHOXD; CHRED; or INCIN.	NA.
P123	Toxaphene	Toxaphene	8001–35–1	0.0095	Composite	1.3	Total (mg/kg).
U001	Acetaldehyde	Acetaldehyde	75–07–0	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U002	Acetone	Acetone	67–64–1	0.28	Grab	160	Total (mg/kg).
U003	Acetonitrile	Acetonitrile	75–05–8	0.17	Grab	INCIN	NA.
U004	Acetophenone	Acetophenone	98–86–2	0.010	Grab	9.7	Total (mg/kg).
U005	2-Acetylaminofluorene	2-Acetylaminofluorene	53–96–3	0.059	Composite	140	Total (mg/kg).
U006	Acetyl chloride	Acetyl chloride	75–36–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U007	Acrylamide	Acrylamide	79–06–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.

U008	Acrylic acid	Acrylic acid	79–10–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U009	Acrylonitrile	Acrylonitrile	107–13–1	0.24	Composite	84	Total (mg/kg).
U010	Mitomycin C	Mitomycin C	50–07–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U011	Amitrole	Amitrole	61–82–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U012	Aniline	Aniline	62–53–3	0.81	Grab	14	Total (mg/kg).
U014	Auramine	Auramine	492–80–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U015	Azaserine	Azaserine	115–02–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U016	Benz(c)acridine	Benz(c)acridine	225–51–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U017	Benzal chloride	Benzal chloride	98–87–3	0.055	Composite	INCIN	NA.
U018	Benz(a)anthracene	Benz(a)anthracene	56–55–3	0.059	Composite	8.2	Total (mg/kg).
U019	Benzene	Benzene	71–43–2	0.14	Composite	36	Total (mg/kg).
U020	Benzenesulfonyl chloride	Benzenesulfonyl chloride	98–09–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U021	Benzidine	Benzidine	92–87–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U022	Benzo(a)pyrene	Benzo(a)pyrene	50–32–8	0.061	Composite	8.2	Total (mg/kg).
U023	Benzotrichloride	Benzotrichloride	98–07–7	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U024	Bis(2-chloroethoxy)methane	Bis(2-chloroethoxy)methane	111–91–1	0.036	Grab	7.2	Total (mg/kg).
U025	Bis(2-chloroethyl)ether	Bis(2-chloroethyl)ether	111–44–4	0.033	Grab	7.2	Total (mg/kg).
U026	Chlornaphazin	Chlornaphazin	494–03–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U027	Bis(2-chloroisopropyl) ether	Bis(2-chloroisopropyl) ether	39638–32–9	0.055	Composite	7.2	Total (mg/kg).
U028	Bis(2-ethylhexyl)phthalate	Bis(2-ethylhexyl) phthalate	117–81–7	0.28	Grab	28	Total (mg/kg).
U029	Bromomethane (Methyl bromide)	Bromomethane (Methyl bromide)	74–83–9	0.11	Grab	15	Total (mg/kg).
U030	4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	101–55–3	0.055	Grab	15	Total (mg/kg).
U031	n-Butyl alcohol	n-Butyl alcohol	71–36–3	5.6	Grab	2.6	Total (mg/kg).
U032	Calcium chromate	Chromium (Total)	7440–47–3	0.32	Grab	0.094	TCLP (mg/l).
U033	Carbonyl fluoride	Carbonyl fluoride	353–50–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
U034	Trichloroacetaldehyde (Chloral)	Trichloroacetaldehyde (Chloral)	75–87–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U035	Chlorambucil	Chlorambucil	305–03–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U036	Chlordane (alpha and gamma)	Chlordane (alpha and gamma)	57–74–9	0.0033	Composite	0.13	Total (mg/kg).
U037	Chlorobenzene	Chlorobenzene	108–90–7	0.057	Composite	5.7	Total (mg/kg).
U038	Chlorobenzilate	Chlorobenzilate	510–15–6	0.10	Composite	INCIN	NA.
U039	p-Chloro-m-cresol	p-Chloro-m-cresol	159–50–7	0.018	Composite	14	Total (mg/kg).
U041	1-Chloro-2,3-epoxypropane (Epichlorohydrin).	1-Chloro-2,3-epoxypropane (Epichlorohydrin).	106–89–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U043	Vinyl chloride	Vinyl chloride	75–01–4	0.27	Composite	33	Total (mg/kg).
U044	Chloroform	Chloroform	67–66–3	0.046	Composite	5.6	Total (mg/kg).
U045	Chloromethane (Methyl chloride)	Chloromethane (Methyl chloride)	74–87–3	0.19	Composite	33	Total (mg/kg).
U046	Chloromethyl methyl ether	Chloromethyl methyl ether	107–30–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U047	2-Chloronaphthalene	2-Chloronaphthalene	91–58–7	0.055	Composite	5.6	Total (mg/kg).
U048	2-Chlorophenol	2-Chlorophenol	95–57–8	0.044	Composite	5.7	Total (mg/kg).
U049	4-Chloro-o-toluidine hydrochloride	4-Chloro-o-toluidine hydrochloride	3165–93–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U050	Chrysene	Chrysene	218–01–9	0.059	Composite	8.2	Total (mg/kg).
U051	Creosote	Naphthalene	91–20–3	0.031	Grab	1.5	Total (mg/kg).
		Pentachlorophenol	87–86–5	0.18	Grab	7.4	Total (mg/kg).
		Phenanthrene	85–01–8	0.031	Grab	1.5	Total (mg/kg).
		Pyrene	129–00–0	0.028	Grab	1.5	Total (mg/kg).
		Toluene	108–88–3	0.028	Grab	28	Total (mg/kg).
		Xylenes (Total)	1330–20–7	0.032	Grab	33	Total (mg/kg).
		Lead	7439–92–1	0.037	Grab	0.51	TCLP (mg/l).
U052	Cresols (Cresylic acid)	o-Cresol	195–48–7	0.11	Composite	5.6	Total (mg/kg).
		Cresols (m- and p-isomers)	NA	0.77	Composite	3.2	Total (mg/kg).
U053	Crotonaldehyde	Crotonaldehyde	4170–30–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA
U055	Cumene	Cumene	98–82–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U056	Cyclohexane	Cyclohexane	110–82–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.

U057	Cyclohexanone	Cyclohexanone	108–94–1	0.36	Grab	FSUBS; or INCIN	NA.
U058	Cyclophosphamide	Cyclophosphamide	50–18–0	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
U059	Daunomycin	Daunomycin	20830–81–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U060	DDD	o,p'-DDD	53–19–0	0.023	Grab	0.087	Total (mg/kg).
		p,p'-DDD	72–54–8	0.023	Grab	0.087	Total (mg/kg).
U061	DDT	o-p'-DDT	789–02–6	0.0039	Composite	0.087	Total (mg/kg).
		p,p'-DDT	50–29–3	0.0039	Composite	0.087	Total (mg/kg).
		o,p'-DDD	53–19–0	0.023	Composite	0.087	Total (mg/kg).
		p,p'-DDD	72–54–8	0.023	Composite	0.087	Total (mg/kg).
		o,p'-DDE	3424–82–6	0.031	Composite	0.087	Total (mg/kg).
		p,p'-DDE	72–55–9	0.031	Composite	0.087	Total (mg/kg).
U062	Diallate	Diallate	2303–16–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U063	Dibenzo(a,h) anthracene	Dibenzo(a,h) anthracene	53–70–3	0.055	Composite	8.2	Total (mg/kg).
U064	1,2,7,8–Dibenzopyrene	1,2,7,8–Dibenzopyrene	189–55–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U066	1,2–Dibromo-3-chloropropane	1,2–Dibromo-3-chloropropane	96–12–8	0.11	Composite	15	Total (mg/kg).
U067	1,2–Dibromoethane (Ethylenedibromide).	1,2–Dibromoethane (Ethylenedibromide).	106–93–4	0.028	Composite	15	Total (mg/kg).
U068	Dibromomethane	Dibromomethane	74–95–3	0.11	Composite	15	Total (mg/kg).
U069	Di-n-butyl phthalate	Di-n-butyl phthalate	84–74–2	0.057	Grab	28	Total (mg/kg).
U070	o-Dichlorobenzene	o-Dichlorobenzene	95–50–1	0.088	Composite	6.2	Total (mg/kg).
U071	1m-Dichlorobenzene	m-Dichlorobenzene	541–73–1	0.036	Grab	6.2	Total (mg/kg).
U072	p-Dichlorobenzene	p-Dichlorobenzene	104–46–7	0.090	Composite	6.2	Total (mg/kg).
U073	3,3'-Dichlorobenzidine	3,3'- Dichlorobenzidine	91–94–1	0.13	Composite	INCIN	NA.
U074	1,4–Dichloro-2-butenecis-	1,4–Dichloro-2-butene	1476–11–5	0.036	Composite	INCIN	NA
		trans-1,4–Dichloro-2-butene	NA	0.036	Composite	INCIN	NA.
U075	Dichlorodifluoromethane	Dichlorodifluoro- methane	75–71–8	0.23	Composite	7.2	Total (mg/kg).
U076	1,1–Dichloroethane	1,1–Dichloroethane	75–34–3	0.059	Composite	7.2	Total (mg/kg).
U077	1,2–Dichloroethane	1,2–Dichloroethane	107–06–2	0.21	Composite	7.2	Total (mg/kg).
U078	1,1–Dichloroethylene	1,1–Dichloroethylene	75–35–4	0.025	Composite	33	Total (mg/kg).
U079	1,2-Dichloroethylene	trans-1,2-Dichloroethylene	156–060–5	0.054	Composite	33	Total (mg/kg).
U080	Methylene chloride	Methylene chloride	75–09–2	0.089	Composite	33	Total (mg/kg).
U081	12,4–Dichlorophenol	12,4–Dichlorophenol	120–83–2	0.044	Composite	14	Total (mg/kg).
U082	2,6–Dichlorophenol	12,6-Dichlorophenol	187–65–0	0.044	Composite	14	Total (mg/kg).
U083	1,2–Dichloropropane	1,2-Dichloropropane	78–87–5	0.85	Composite	18	Total (mg/kg).
U084	1,3-Dichloropropene	cis-1,3-Dichloropropene	10061–01–5	0.036	Composite	18	Total (mg/kg).
		trans-1,3-Dichloropropylene	10061–02–6	0.036	Composite	18	Total (mg/kg).
U085	1,2:3,4–Diepoxybutane	1,2:3,4–Diepoxybutane	1464–53–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U086	N,N-Diethylhydrazine	N,N-Diethylhydrazine	1615–80–1	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U087	O,O-Diethyl S-methyldithiophosphate.	O,O-Diethyl S-methyldithiophosphate.	3288–58–2	CARBN; or INCIN	NA	FSUBS; or INCIN	NA
U088	Diethyl phthalate	Diethyl phthalate	84–66–2	0.2	Grab	28	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
U089	Diethyl stilbestrol	Diethyl stilbestro	156–53–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U090	Dihydrosafrole	Dihydrosafrole	94–58–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U091	3,3'-Dimethoxybenzidine	3,3'-Dimethoxy-benzidine	119–90–4	0.13	Composite	INCIN	NA.
U092	Dimethylamine	Dimethylamine	124–40–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U093	p-Dimethylaminoazobenzene	p-Dimethylamino- azobenzene	60–11–7	0.13	Composite	INCIN	NA.
U094	7,12-Dimethyl benz(a)anthracene	7,12-Dimethyl benz(a) anthracene	57–97–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U095	3,3'-Dimethylbenzidine	3,3'-Dimethyl-benzidine	119–93–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U096	a,a-Dimethyl benzyl hydroperoxide	a,a-Dimethyl benzyl hydroperoxide	80–15–9	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U097	Dimethylcarbomyl chloride	Dimethylcarbomyl chloride	79–44–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U098	1,1-Dimethylhydrazine	1,1-Dimethylhydrazine	57–14–7	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U099	1,2-Dimethylhydrazine	1,2-Dimethylhydrazine	540–73–8	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U101	2,4-Dimethylphenol	2,4-Dimethylphenol	105–67–9	0.036	Composite	14	Total (mg/kg).
U102	Dimethyl phthalate	Dimethyl phthalate	131–11–3	0.047	Grab	28	Total (mg/kg).
U103	Dimethyl sulfate	Dimethyl sulfate	77–78–1	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U105	2,4-Dinitrotoluene	2,4-Dinitrotoluene	121–14–2	0.32	Composite	140	Total (mg/kg).
U106	2,6-Dinitrotoluene	2,6-Dinitrotoluene	606–20–2	0.55	Composite	28	Total (mg/kg).
U107	Di-n-octyl phthalate	Di-n-octyl phthalate	117–84–0	0.017	Grab	28	Total (mg/kg).
U108	1,4-Dioxane	1,4-Dioxane	123–91–1	0.12	Composite	170	Total (mg/kg).

U109	1,2-Diphenylhydrazine	1,2-Diphenylhydrazine	122–66–7	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA
U110	Dipropylamine	Dipropylamine	142–84–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U111	Di-n-propylnitrosoamine	Di-n-propylnitrosoamine	621–64–7	0.40	Composite	14	Total (mg/kg).
U112	Ethyl acetate	Ethyl acetate	141–78–6	0.34	Composite	33	Total (mg/kg)
U113	Ethyl acrylate	Ethyl acrylate	140–88–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U114	Ethylene bis-dithiocarbamic acid	Ethylene bis-dithiocarbamic acid	111–54–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U115	Ethylene oxide	Ethylene oxide	75–21–8	0.12	NA	NA	NA.
U116	Ethylene thiourea	Ethylene thiourea	96–45–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U117	Ethyl ether	Ethyl ether	60–29–7	0.12	Composite	160	Total (mg/kg).
U118	Ethyl methacrylate	Ethyl methacrylate	97–63–2	0.14	Composite	160	Total (mg/kg)
U119	Ethyl methane sulfonate	Ethyl methane sulfonate	62–50–0	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U120	Fluoranthene	Fluoranthene	206–44–0	0.068	Composite	8.2	Total (mg/kg).
U121	Trichloromonofluoro-methane	Trichloromonofluoro-methane	75–69–4	0.020	Composite	33	Total (mg/kg).
U122	Formaldehyde	Formaldehyde	50–00–0	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U123	Formic acid	Formic acid	64–18–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA
U124	Furan	Furan	110–00–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U125	Furfural	Furfural	98–01–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA
U126	Glycidadehyde	Glycidadehyde	765–34–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U127	Hexachlorobenzene	Hexachlorobenzene	118–74–1	0.055	Composite	37	Total (mg/kg).
U128	Hexachlorobutadiene	Hexachlorobuta-diene	87–68–3	0.055	Composite	28	Total (mg/kg).
U129	Lindane	alpha-BHC	319–84–6	0.00014	Composite	0.066	Total (mg/kg).
		beta-BHC	319–85–7	0.00014	Composite	0.066	Total (mg/kg).
		delta-BHC	319–86–8	0.023	Composite	0.066	Total (mg/kg).
		Gamma-BHC (Lindane)	58–89–9	0.0017	Composite	0.066	Total (mg/kg).
U130	Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	77–47–7	0.057	Composite	3.6	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
U131	Hexachloroethane	Hexachloroethane	67–72–1	0.055	Composite	28	Total (mg/kg).
U132	Hexachlorophenene	Hexachlorophenene	70–30–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U133	Hydrazine	Hydrazine	302–01–2	CHOXD; CHRED; CARBN; DIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U134	Hydrogen fluoride	Fluoride	16964–48–8	35	Grab	NA	NA.
		Hydrogen fluoride	7664–39–3	NA	NA	ADGAS fb NEUTR; or NEUTR.	NA.
U135	Hydrogen sulfide	Hydrogen sulfide	7783–06–4	CHOXD; CHRED; or INCIN.	NA	CHOXD; CHRED; or INCIN.	NA
U136	Cacodylic acid	Arsenic	7440–38–2	0.79	Grab	5.6	TCLP (mg/l).
U137	Indeno(1,2,3-c,d)pyrene	Indeno(1,2,3-c,d)pyrene	193–39–5	0.0055	Composite	8.2	Total (mg/kg).
U138	Iodomethane	Iodomethane	74–88–4	0.19	Composite	65	Total (mg/kg).
U140	Isobutyl alcohol	Isobutyl alcohol	78–83–1	5.6	Grab	170	Total (mg/kg).
U141	Isosafrole	Isosafrole	120–58–1	0.081	Grab	2.6	Total (mg/kg).
U142	Kepone	Kepone	143–50–8	0.0011	Grab	0.13	Total (mg/kg).
U143	Lasiocarpine	Lasiocarpine	303–34–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U144	Lead acetate	Lead	7439–92–1	0.040	Grab	0.51	TCLP (mg/l).
U145	Lead phosphate	Lead	7439–92–1	0.040	Grab	0.51	TCLP (mg/l).
U146	Lead subacetate	Lead	7439–92–1	0.040	Grab	0.51	TCLP (mg/l).
U147	Maleic anhydride	Maleic anhydride	108–31–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U148	Maleic anhydride	Maleic hydrazide	123–33–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U149	Malononitrile	Malononitrile	109–77–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U150	Melphalan	Melphalan	148–82–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U151	Low Mercury Subcategory—less than 260 mg/kg Mercury—residues from RMERC—Mercury.	Mercury	7439–97–6	0.030	Grab	0.20	TCLP (mg/l).
U151	Low Mercury Subcategory—less than 260 mg/kg Mercury—that are not residues from RMERC—Mercury.	Mercury	7439–97–6	0.030	Grab	0.025	TCLP (mg/l).

U151	Mercury: (High Mercury Subcategory—greater than or equal to 260 mg/kg total Mercury).	Mercury	7439–97–6	NA	NA	RMERC	NA.
U151	Mercury: Elemental Mercury contaminated with radioactive materials.	Mercury	7439–97–6	NA	NA	AMLGM	NA.
U152	Methacrylonitrile	Methacrylonitrile	126–98–7	0.24	Composite	84	Total (mg/kg).
U153	Methane thiol	Methane thiol	74–93–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U154	Methanol	Methanol	67–56–1	5.6	Grab	FSUBS; or INCIN	NA.
U155	Methapyrilene	Methapyrilene	91–80–5	0.081	Grab	1.5	Total (mg/kg).
U156	Methyl chlorocarbonate	Methyl chlorocarbonate	79–22–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U157	3-Methylcholanthrene	3-Methylcholan-threne	56–49–5	0.0055	Composite	15	Total (mg/kg).
U158	4,4′-Methylenebis(2-chloroaniline)	4,4′-Methylenebis-(2-chloroaniline)	101–14–4	0.50	Composite	35	Total (mg/kg).
U159	Methyl ethyl ketone	Methyl ethyl ketone	78–93–3	0.28	Grab	36	Total (mg/kg).
U160	Methyl ethyl ketone peroxide	Methyl ethyl ketone peroxide	1338–23–4	CHOXD; CHRED; CARBN; BIODG; or INCIN.	NA	FSUBS; CHOXD; CHRED; or INCIN.	NA.
U161	Methyl isobutyl ketone	Methyl isobutyl ketone	108–10–1	0.14	Grab	33	Total (mg/kg).
U162	Methyl methacrylate	Methyl methacrylate	80–62–6	0.14	Grab	160	Total (mg/kg).
U163	N-Methyl N′-nitro N-Nitroso- guanidine.	N-Methyl N′-nitro N-Nitroso- guanidine.	70–25–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U164	Methylthiouracil	Methylthiouracil	56–04–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U165	Naphthalene	Naphthalene	91–20–3	0.059	Composite	3.1	Total (mg/kg).
U166	1,4-Naphthoquinone	1,4-Naphthoquinone	130–15–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U167	1-Naphthylamine	1-Naphthylamine	134–32–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U168	2-Naphthylamine	2-Naphthylamine	91–59–8	0.52	Composite	INCIN	NA.
U169	Nitrobenzene	Nitrobenzene	98–95–3	0.068	Composite	14	Total (mg/kg).
U170	4-Nitrophenol	4-Nitrophenol	100–02–7	0.12	Composite	29	Total (mg/kg).
U171	2-Nitropropane	2-Nitropropane	79–46–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U172	n-Nitrosodi-n-butylamine	n-Nitrosodi-n-butylamine	924–16–3	0.40	Composite	17	Total (mg/kg).
U173	N-Nitroso-di-n-ethanolamine	N-Nitroso-di-n-ethanolamine	1116–54–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U174	n-Nitrosodiethylamine	n-Nitrosodiethyl-amine	55–18–5	0.40	Composite	28	Total (mg/kg).

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
U176	N-Nitroso-N-ethylurea	N-Nitroso-N-ethylurea	759–73–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U177	N-Nitroso-N-methylurea	N-Nitroso-N-methylurea	684–93–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U178	N-Nitroso-N-methylurethane	N-Nitroso-N-methylurethane	615–53–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U179	n-Nitrosopiperidine	n-Nitrosopiperidine	100–75–4	0.013	Composite	35	Total (mg/kg).
U180	n-Nitrosopyrrolidine	n-Nitrosopyrrolidine	930–55–2	0.013	Composite	35	Total (mg/kg).
U181	5-Nitro-o-toluidine	5-Nitro-o-toluidine	99–55–8	0.32	Composite	28	Total (mg/kg).
U182	Paraldehyde	Paraldehyde	123–63–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U183	Pentachlorobenzene	Pentachlorobenzene	608–93–5	0.055	Composite	37	Total (mg/kg).
U184	Pentachloroethane	Pentachloroethane	76–01–7	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U185	Pentachloronitrobenzene	Pentachloronitro-benzene	82–68–8	0.055	Composite	4.8	Total (mg/kg).
U186	1,3-Pentadiene	1,3-Pentadiene	504–60–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U187	Phenacetin	Phenacetin	62–44–2	0.081	Grab	16	Total (mg/kg).
U188	Phenol	Phenol	108–95–2	0.039	Grab	6.2	Total (mg/kg).
U189	Phosphorus sulfide	Phosphorus sulfide	1314–80–3	CHOXD; CHRED; or INCIN.	NA	CHOXD; CHRED; or INCIN.	NA.
U190	Phthalic anhydride (measured as Phthalic acid).	Phthalic anhydride (measured as Phthalic acid).	85–44–9	0.069	Grab	28	Total (mg/kg).
U191	2-Picoline	2-Picoline	109–06–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U192	Pronamide	Pronamide	23950–58–5	0.093	Grab	1.5	Total (mg/kg).
U193	1,3-Propane sultone	1,3-Propane sultone	1120–71–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U194	n-Propylamine	n-Propylamine	107–10–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U196	Pyridine	Pyridine	110–86–1	0.014	Composite	16	Total (mg/kg).

U197	p-Benzoquinone	p-Benzoquinone	106–51–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U200	Reserpine	Reserpine	50–55–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U201	Resorcinol	Resorcinol	108–46–3	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U202	Saccharin and salts	Saccharin and salts	81–07–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U203	Safrole	Safrole	94–59–7	0.081	Grab	22	Total (mg/kg).
U204	Selenium dioxide	Selenium	7782–49–2	1.0	Grab	5.7	TCLP (mg/l).
U205	Selenium sulfide	Selenium	7782–49–2	1.0	Grab	5.7	TCLP (mg/l).
U206	Streptozatocin	Streptozatocin	18883–66–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U207	1,2,4,5-Tetrachlorobenzene	1,2,4,5-Tetrachlorobenzene	95–94–3	0.055	Composite	19	Total (mg/kg).
U208	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	630–20–6	0.057	Grab	42	Total (mg/kg).
U209	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	79–34–5	0.057	Composite	42	Total (mg/kg).
U210	Tetrachloroethylene	Tetrachloroethylene	127–18–4	0.056	Composite	5.6	Total (mg/kg).
U211	Carbon tetrachloride	Carbon tetrachloride	56–23–5	0.057	Composite	5.6	Total (mg/kg).
U213	Tetrahydrofuran	Tetrahydrofuran	109–99–9	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	N
U214	Thallium(I)acetate	Thallium (I) acetate	563–68–8	NA	NA	RTHRM; or STABL.	NA
		Thallium	7440–28–0	0.14	Composite	NA	NA.
U215	Thallium(I)carbonate	Thallium (I) carbonate	6533–73–9	NA	NA	RTHRM; or STABL.	NA.
		Thallium	7440–28–0	0.14	Composite	NA	NA.
U216	Thallium (I) chloride	Thallium (I) chloride	7791–12–0	NA	NA	RTHRM; or STABL.	NA.
		Thallium	7440–28–0	0.14	Composite	NA	NA.
U217	Thallium (I) nitrate	Thallium (I) nitrate	10102–45–1	NA	NA	RTHRM; or STABL.	NA.
		Thallium	7440–28–0	0.14	Composite	NA	NA.
U218	Thioacetamide	Thioacetamide	62–55–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NAINCIN	NA..	
U219	Thiourea	Thiourea	62–56–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U220	Toluene	Toluene	108–88–3	0.080	Composite	28	NA.
U221	Toluenediamine	Toluenediamine	25376–45–8	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
U222	o-Toluidine hydrochloride	o-Toluidine hydrochloride	636–21–5	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.

TREATMENT STANDARDS FOR HAZARDOUS WASTES—Continued

Waste code	Waste description and/or treatment subcategory	Regulated hazardous constituent		Wastewaters		Nonwastewaters	
		Common name	CAS No.	Concentration (mg/l) or technology code	Sampling basis	Concentration or technology code	Sampling basis and units
U223	Toluene diisocyanate	Toluene diisocyanate	26471–62–5	CARBN; or INCIN	NA	FSUBS; or INCIN	NA.
U225	Tribromomethane (Bromoform)	Tribromomethane (Bromoform)	75–25–2	0.63	Composite	15	Total (mg/kg).
U226	1,1,1-Trichloroethane	1,1,1–Trichloroethane	71–55–6	0.054	Composite	5.6	Total (mg/kg).
U227	1,1,2-Trichloroethane	1,1,2-Trichloroethane	79–00–5	0.054	Composite	5.6	Total (mg/kg).
U228	Trichloroethylene	Trichloroethylene	79–01–6	0.054	Composite	5.6	Total (mg/kg).
U234	sym-Trinitrobenzene	sym-Trinitrobenzene	99–35–4	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U235	tris-(2,3-Dibromopropyl)phosphate	tris-(2,3-Dibromopropyl)phosphate	126–72–7	0.025	Grab	0.10	Total (mg/kg).
U236	Trypan Blue	Trypan Blue	72–57–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U237	Uracil mustard	Uracil mustard	66–75–1	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U238	Ethyl carbamate	Ethyl carbamate	51–79–6	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U239	Xylenes	Xylenes	1330–20–7	0.32	Composite	28	Total (mg/kg).
U240	2,4-Dichlorophenoxyacetic acid	2,4-Dichlorophenoxyacetic acid	94–75–7	0.72	Grab	10	Total (mg/kg).
U240	2,4-Dichlorophenoxyacetic Salts and esters.	2,4-Dichloro- phenoxy- acetic	NA	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U243	Hexachloropropene	Hexachloropropene	1888–71–7	0.035	Composite	28	Total (mg/kg).
U244	Thiram	Thiram	137–26–8	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	INCIN	NA.
U246	Cyanogen bromide	Cyanogen bromide	506–68–3	CHOXD; WETOX; or INCIN.	NA	CHOXD; WETOX; or INCIN.	NA.
U247	Methoxychlor	Methoxychlor	72–43–5	0.25	Composite	0.18	Total (mg/kg).
U248	Warfarin (greater than or equal to 3%).	Warfarin	81–81–2	(WETOX or CHOXD) fb CARBN; or INCIN.	NA	FSUBS; or INCIN	NA.
U249	Zinc Phosphide (<10%)	Zinc Phosphide	1314–84–7	CHOXD; CHRED; or INCIN.	NA	CHOXD; CHRED; or INCIN.	NA.
U328	o-toluidine	o-toluidine	95–53–4	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN.	NA	INCIN; or Thermal Destruction.	NA.

U353	p-toluidine	p-toluidine	106–49–0	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN.	NA	INCIN; or Thermal Destruction.	NA.
U359	2-ethoxy- ethanol	2-ethoxy-ethanol	110–80–5	INCIN; or CHOXD fb, (BIODG or CARBN); or BIODG fb CARBN.	NA	INCIN; or FSUB[1]	NA.

[1] F039 (and D001 and D002 wastes prohibited under § 268.37)

§ 268.41 [Reserved]

21. Section 268.41 in subpart D is removed and reserved.

22. Section 268.42 is amended by removing Table 2 and Table 3, and revising paragraphs (a) introductory text, (c)(2) and (d) to read as follows:

§ 268.42 Treatment standards expressed as specified technologies.

(a) The following wastes in paragraphs (a)(1) and (a)(2) of this section and in the Table of Treatment Standards for which standards are expressed as a treatment method rather than a concentration must be treated using the technology or technologies specified in paragraphs (a)(1) and (a)(2) and Table 1 of this section.

* * * * *

(c) * * *

(2) The lab pack does not contain the following wastes: D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, U151.

* * * * *

(d) Hazardous debris containing radioactive waste is subject to the treatment standards specified in § 268.45.

§ 268.43 [Reserved]

23. Section 268.43 in Subpart D is removed and reserved.

24. In subpart D, § 268.47 is added to read as follows:

§ 268.47 Treatment standards for hazardous soil.

(a) Treatment standards for the organic and inorganic constituents listed in § 268.48, Table UTS, Universal Treatment Standards, are applicable to RCRA hazardous soil before the soil is land disposed.

(b) Hazardous soil may be land disposed if the concentration of each constituent found on Table UTS in the soil is equal to or less than:

(1) A 90% reduction of the initial untreated concentration, provided that the resulting treated concentration is less than or equal to ten times the universal treatment standard; or

(2) The concentration is less than or equal to ten times the universal treatment standard; or

(3) A 90% reduction of the initial untreated concentration unless such would result in a treatment level below the universal treatment standard for that constituent, in which case the universal treatment standard would apply.

25. In subpart D, § 268.48 is added to read as follows:

§ 268.48 Universal treatment standards.

(a) Table UTS identifies the hazardous constituents associated with restricted hazardous wastes regulated under this part. It also establishes the concentrations of those constituents that may not be exceeded in the waste or treatment residual, or in an extract of such waste or residual, if so specified in Table UTS.

(1) Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in the following Table UTS.

(2) The constituent-specific treatment standards in Table UTS supersede the treatment standards found at §§ 268.41 and 268.43, when such constituents are regulated in wastes listed as hazardous under 40 CFR part 261, subpart D, of this chapter.

(3) The requirements of paragraph (a)(2) of this section do not apply to the hazardous waste specified in §§ 268.41 and 268.43 as F024. This waste is subject to the treatment standards in §§ 268.41 and 268.43.

§ 268.48 TABLE UTS—UNIVERSAL TREATMENT STANDARDS

Regulated hazardous constituent	Wastewater concentration total composition (mg/l)	Nonwastewater concentration total composition (mg/kg)
Acenaphthalene	0.059	3.4
Acenaphthene	0.059	3.4
Acetone	0.28	160
Acetonitrile	0.17	NR
Acetophenone	0.010	9.7
2-Acetylaminofluorene	0.059	140
Acrolein	0.29	NR
Acrylonitrile	0.24	84
Aldrin	0.021	0.0664
4-Aminobiphenyl	0.13	NR
Aniline	0.81	14
Anthracene	0.059	3.4
Aramite	0.36	NR
Aroclor 1016	0.013	0.92
Aroclor 1221	0.014	0.92
Aroclor 1232	0.013	0.92
Aroclor 1242	0.017	0.92
Aroclor 1248	0.013	0.92
Aroclor 1254	0.014	1.8
Aroclor 1260	0.014	1.8
alpha-BHC	0.00014	0.066
beta-BHC	0.00014	0.066
delta-BHC	0.023	0.066
gamma-BHC	0.0017	0.066
Benz(a)anthracene	0.059	3.4
Benzal chloride	0.055	6.0
Benzene	0.14	10
Benzo(a)pyrene	0.061	3.4
Benzo-(b)fluoranthene	0.11	6.8
Benzo(g,h,i)perylene	0.0055	1.8
Benzo(k)fluoranthene	0.11	6.8
Bis(2-chloroethoxy)methane	0.036	7.2
Bis(2-chloroethyl)ether	0.033	6.0

§ 268.48 TABLE UTS—UNIVERSAL TREATMENT STANDARDS—Continued

Regulated hazardous constituent	Wastewater concentration total composition (mg/l)	Nonwastewater concentration total composition (mg/kg)
Bis(2-chloroisopropyl)ether	0.055	7.2
Bis(2-ethylhexyl)phthalate	0.28	28
Bromodichloromethane	0.35	15
Bromomethane	0.11	15
4-Bromophenyl phenyl ether	0.055	15
n-Butyl alcohol	5.6	2.6
Butyl benzyl phthalate	0.017	28
2-sec-Butyl-4,6- dinitrophenol	0.066	2.5
Carbon disulfide	0.014	4.81
Carbon tetrachloride	0.057	6.0
Chlordane	0.0033	0.26
p-Chloroaniline	0.46	16
Chlorobenzene	0.057	6.0
Chlorobenzilate	0.10	NR
2-Chloro-1,3-butadiene	0.057	NR
Chlorodibromomethane	0.057	15
Chloroethane	0.27	6.0
Chloroform	0.046	6.0
p-Chloro-m-cresol	0.018	14
2-Chloroethyl vinyl ether	0.062	NR
Chloromethane (Methyl chloride)	0.19	30
2-Chloronaphthalene	0.055	5.6
2-Chlorophenol	0.044	5.7
3-Chloropropylene	0.036	30
Chrysene	0.059	3.4
Cresol (m- and p-isomers)	0.77	3.2
o-Cresol	0.11	5.6
Cyclohexanone	0.36	0.75
o,p'-DDD	0.023	0.087
p,p'-DDD	0.023	0.087
o,p'-DDE	0.031	0.087
p,p'-DDE	0.031	0.087
o,p'-DDT	0.0039	0.087
p,p'-DDT	0.0039	0.087
Dibenzo(a,e)pyrene	0.061	NR
Dibenz(a,h)anthracene	0.055	8.2
tris-(2,3–Dibromopropyl) phosphate	0.11	NR
1,2-Dibromo-3-chloropropane	0.11	15
1,2-Dibromoethane	0.028	15
Dibromomethane	0.11	15
m-Dichlorobenzene	0.036	6.0
o-Dichlorobenzene	0.088	6.0
p-Dichlorobenzene	0.090	6.0
Dichlorodifluoromethane	0.23	7.2
1,1-Dichloroethane	0.059	6.0
1,2-Dichloroethane	0.21	6.0
1,1-Dichloroethylene	0.025	6.0
trans-1,2-Dichloroethylene	0.054	30
2,4-Dichlorophenol	0.044	14
2,6-Dichlorophenol	0.044	14
2,4-Dichlorophenoxyacetic acid (2,4-D)	0.72	10
1,2-Dichloropropane	0.85	18
cis-1,3-Dichloropropylene	0.036	18
trans-1,3-Dichloropropylene	0.036	18
Dieldrin	0.017	0.13
Diethyl phthalate	0.20	28
p-Dimethylaminoazo-benzene	0.13	NR
2,4-Dimethylphenol	0.036	14
Dimethyl phthalate	0.047	28
Di-n-butyl phthalate	0.057	28
1,4-Dinitrobenzene	0.32	2.3
4,6-Dinitrocresol	0.28	160
2,4-Dinitrophenol	0.12	160
2,4-Dinitrotoluene	0.32	140
2,6-Dinitrotoluene	0.55	28
Di-n-octyl phthalate	0.017	28
Di-n-propylnitrosamine	0.40	14
Diphenylamine	0.92	13
1,2-Diphenyl hydrazine	0.087	NR

§ 268.48 TABLE UTS—UNIVERSAL TREATMENT STANDARDS—Continued

Regulated hazardous constituent	Wastewater concentration total composition (mg/l)	Nonwastewater concentration total composition (mg/kg)
Diphenylnitrosoamine	0.92	13
1,4-Dioxane	0.12	170
Disulfoton	0.017	6.2
Endosulfan I	0.023	0.066
Endosulfan II	0.029	0.13
Endosulfan sulfate	0.029	0.13
Endrin	0.0028	0.13
Endrin aldehyde	0.025	0.13
Ethyl acetate	0.34	33
Ethyl benzene	0.057	10
Ethyl ether	0.12	160
Ethyl methacrylate	0.14	160
Ethylene oxide	0.12	NR
Famphur	0.017	15
Fluoranthene	0.068	3.4
Fluorene	0.059	3.4
Heptachlor	0.0012	0.066
Heptachlor epoxide	0.016	0.066
Hexachlorobenzene	0.055	10
Hexachlorobutadiene	0.055	5.6
Hexachlorodibenzofurans	0.000063	0.001
Hexachlorodibenzo-p-dioxins	0.000063	0.001
Hexachlorocyclopentadiene	0.057	2.4
Hexachloroethane	0.055	30
Hexachloropropylene	0.035	30
Indeno(1,2,3-c,d)pyrene	0.0055	3.4
Iodomethane	0.19	65
Isobutyl alcohol	5.6	170
Isodrin	0.021	0.066
Isosafrole	0.081	2.6
Kepone	0.0011	0.13
Methacrylonitrile	0.24	84
Methanol	5.6	0.75
Methapyrilene	0.081	1.5
Methoxychlor	0.25	0.18
3-Methylchloanthrene	0.0055	15
4,4-Methylene-bis-(2-chloraniline)	0.50	30
Methylene chloride	0.089	30
Methyl ethyl ketone	0.28	36
Methyl isobutyl ketone	0.14	33
Methyl methacrylate	0.14	160
Methyl methansulfonate	0.018	NR
Methyl parathion	0.014	4.6
Naphthalene	0.059	5.6
2-Naphthylamine	0.52	NR
p-Nitroaniline	0.0	28
o-Nitroaniline	NR	14
Nitrobenzene	0.068*	14
5-Nitro-o-toluidine	0.32	28
o-Nitrophenol	NR	13
p-Nitrophenol	0.12	29
N-Nitrosodiethylamine	0.40	28
N-Nitrosodimethylamine	0.40	2.3
N-Nitrosodi-n-butylamine	0.40	17
N-Nitrosomethylethylamine	0.40	2.3
N-Nitrosomorpholine	0.40	2.3
N-Nitrosopiperidine	0.013	35
N-Nitrosopyrrolidine	0.013	35
Parathion	0.014	4.6
Pentachlorobenzene	0.055	10
Pentachlorodibenzofurans	0.000035	0.001
Pentachlorodibenzo-p-dioxins	0.000063	0.001
Pentachloroethane	NR	6
Pentachloronitrobenzene	0.055	4.8
Pentachlorophenol	0.089	7.4
Phenacetin	0.081	16
Phenanthrene	0.059	5.6
Phenol	0.039	6.2
Phorate	0.021	4.6

§ 268.48 TABLE UTS—UNIVERSAL TREATMENT STANDARDS—Continued

Regulated hazardous constituent	Wastewater concentration total composition (mg/l)	Nonwastewater concentration total composition (mg/kg)
Phthalic acid	0.055	28
Phthalic anhydride	0.055	28
Pronamide	0.093	1.5
Propanenitrile	0.24	360
Pyrene	0.067	8.2
Pyridine	0.014	16
Safrole	0.081	22
Silvex (2,4,5-TP)	0.72	7.9
2,4,5,-T	0.72	7.9
1,2,4,5-Tetrachlorobenzene	0.055	14
Tetrachlorodibenzofurans	0.000063	0.001
Tetrachlorodibenzo-p-dioxins	0.000063	0.001
1,1,1,2-Tetrachloroethane	0.057	6.0
1,1,2,2-Tetrachloroethane	0.057	6.0
Tetrachloroethylene	0.056	6.0
2,3,4,6-Tetrachlorophenol	0.030	7.4
Toluene	0.080	10
Toxaphene	0.0095	2.6
Tribromomethane (Bromoform)	0.63	15
1,2,4-Trichlorobenzene	0.055	19
1,1,1-Trichloroethane	0.054	6.0
1,1,2-Trichloroethane	0.054	6.0
Trichloroethylene	0.054	6.0
Trichloromonofluoromethane	0.020	30
2,4,5-Trichlorophenol	0.18	7.4
2,4,6-Trichlorophenol	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid	0.72	7.9
1,2,3-Trichloropropane	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
Vinyl chloride	0.27	6.0
Xylenes (total)	0.32	30
Total PCBs	0.1	10

Regulated hazardous constituent	Wastewater concentration total composition (mg/l)	Nonwastewater concentration TCLP (mg/l)
Antimony	1.9	2.1
Arsenic	1.4	5.0
Barium	1.2	7.6
Beryllium	0.82	0.014
Cadmium	0.20	0.19
Chromium (total)	0.37	0.33
Cyanide (total)	1.9	[1]590
Cyanide (amenable)	NR	[1]30
Lead	0.28	0.37
Mercury	0.15	0.009
Nickel	0.55	5.0
Selenium	0.82	0.16
Silver	0.29	0.30
Thallium	1.4	0.078
Vanadium	0.042	0.23
Zinc	1.0	5.3

[1] As analyzed using SW–846 Method 9010 or 9012; sample size 10 gram; distillation time one hour and fifteen minutes.

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

26. The authority citation for part 271 continues to read as follows:

Authority: 42 U.S.C. 6905, 6912(a), and 6926.

Subpart A—Requirements for Final Authorization

27. Section 271.1(j) is amended by adding the following entries to Table 1 in chronological order by date of publication in the **Federal Register**, and by adding the following entries to Table 2 in chronological order by effective date in the **Federal Register**:

§ 271.1 Purpose and scope.

* * * * *

(j) * * *

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	FEDERAL REGISTER reference	Effective date
•	•	•	•
[Insert date of publication in the Federal Register (FR)].	Land disposal restrictions for newly listed and identified wastes in §268.38 and hazardous soil in §268.47, and universal treatment standards in §268.48.	[Insert FR page numbers].	[Insert date of signature of final rule].
•	•	•	•

TABLE 2.—SELF-IMPLEMENTING PROVISIONS OF THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Effective date	Self-implementing provision	RCRA citation	FEDERAL REGISTER reference
•	•	•	•
[Insert date of signature of final rule].	Prohibition on land disposal of newly listed wastes and treatment standards for hazardous soil in §268.47 and universal standards in §268.48.	3004(g)(6)(A) and 3004(m).	[Insert date of publication] 58 FR [insert page numbers].
•	•	•	•

[FR Doc. 93-21703 Filed 9-13-93; 8:45 am]
BILLING CODE 6560-50-P

federal register

Tuesday
September 14, 1993

Part III

Department of the Treasury

Office of the Comptroller of the Currency

Federal Reserve System

Federal Deposit Insurance Corporation

12 CFR Parts 3, et al.

Risk-Based Capital Standards: Interest Rate Risk; Proposed Rule

DEPARTMENT OF THE TREASURY

Office of the Comptroller of the Currency

12 CFR Part 3

[Docket No. 93–11]

FEDERAL RESERVE SYSTEM

12 CFR Part 208

[Docket No. R–0802]

FEDERAL DEPOSIT INSURANCE CORPORATION

12 CFR Part 325

RIN 3064–AB22

Risk-Based Capital Standards: Interest Rate Risk

AGENCIES: Office of the Comptroller of the Currency (OCC), Treasury, Board of Governors of the Federal Reserve System (Board), and Federal Deposit Insurance Corporation (FDIC).

ACTION: Notice of proposed rulemaking.

SUMMARY: The OCC, the Board, and the FDIC (the Banking Agencies) are issuing this proposed rule to implement the portion of section 305 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) that requires a revision of their risk-based capital guidelines to ensure that those standards take adequate account of interest rate risk (IRR). Other revisions to the risk-based capital standards as prescribed in section 305 of FDICIA are to be addressed in separate rulemakings.

This proposal would amend the Banking Agencies' capital adequacy standards to provide for consideration of IRR in the overall determination of a bank's minimum capital ratios. The intended effect of the proposal would be to ensure that banking institutions effectively measure and monitor their IRR and that they maintain adequate capital for that risk.

As part of the proposal, the Banking Agencies are publishing for comment procedures for measuring IRR exposures and two alternative methods for determining what amount of additional capital, if any, a bank may be required to have for interest rate risk. In addition, the Banking Agencies will recommend to the Federal Financial Institutions Examination Council (FFIEC) expanded Call Report requirements to facilitate the monitoring of IRR exposures of commercial banks.

The Banking Agencies sought public comment on a proposed framework for IRR in August, 1992. The current proposal reflects substantial modifications to that proposal in response to the concerns raised and recommendations made by commenters. The proposed amendments to the regulations differ among the Banking Agencies to take account of the existing regulatory structure at each Agency. Nonetheless, the proposed amendments are intended to have the same effect.

DATES: Comments must be received on or before October 29, 1993.

ADDRESSES: Interested parties are invited to submit written comments to any or all of the Banking Agencies. All comments will be shared among the Banking Agencies.

OCC: Written comments should be submitted to Docket No. 93–11, Communications Division, Ninth Floor, Office of the Comptroller of the Currency, 250 E Street, SW., Washington, DC 20219, Attention: Karen Carter. Comments will be available for inspection and photocopying at that address.

Board of Governors: Comments, which should refer to Docket No. R–0802, may be mailed to Mr. William Wiles, Secretary, Board of Governors of the Federal Reserve System, 20th and Constitution Avenue, NW., Washington, DC 20551. Comments addressed to Mr. Wiles may also be delivered to the Board's mail room between 8:45 a.m. and 5:15 p.m. and to the security control room outside of those hours. Both the mail room and control room are accessible from the courtyard entrance on 20th Street between Constitution Avenue and C Street, NW. Comments may be inspected in Room B–1122 between 9 a.m. and 5 p.m., except as provided in § 261.8 of the Board's "Rules Regarding Availability of Information," 12 CFR 261.8.

FDIC: Hoyle L. Robinson, Executive Secretary, Attention: Room F–400, Federal Deposit Insurance Corporation, 550 17th Street, NW., Washington, DC 20429. Comments may be hand-delivered to Room F–400, 1776 F Street NW., Washington, DC 20429, on business days between 8:30 a.m. and 5 p.m. [FAX number (202) 898–3838]. Comments will be available for inspection and photocopying in Room 7118, 550 17th Street, NW., Washington, DC 20429, between 9 a.m. and 4:30 p.m. on business days.

FOR FURTHER INFORMATION CONTACT:

OCC: Christina Benson, Capital Markets Specialist (202/874–5070), or Kurt Wilhelm, National Bank Examiner (202/874–5070), Office of the Chief National Bank Examiner; Kevin Jacques, Financial Economist, Economics and Evaluation (202/874–5220), and Ronald Shimabukuro, Senior Attorney, Bank Operations and Assets Division (202/874–4460), Office of the Comptroller of the Currency, 250 E Street, SW., Washington, DC 20219.

Board of Governors: James Houpt, Assistant Director (202/452–3358), James Embersit, Manager (202/452–5249), William Treacy, Supervisory Financial Analyst (202/452–3859), Division of Banking Supervision and Regulation; Scott G. Alvarez, Associate General Counsel (202/452–3583), Gregory A. Baer, Senior Attorney (202/452–3236), Legal Division, Board of Governors of the Federal Reserve System. For the hearing impaired only, Telecommunication Device for the Deaf (TDD), Dorothea Thompson (202/452–3544), Board of Governors of the Federal Reserve System, 20th and C Streets, NW., Washington, DC 20551.

FDIC: William A. Stark, Assistant Director (202/898–6972) or Sharon Lee, Capital Markets Specialist (202/898–6789), Division of Supervision; for legal issues, Claude A. Rollin, Senior Counsel (202/898–3985), Legal Division, Federal Deposit Insurance Corporation, 550 17th Street, NW., Washington, DC 20429.

SUPPLEMENTARY INFORMATION:

A. Background

1. Section 305 and the Basle Accord

IRR is the adverse effect that changes in market interest rates may have on a bank's financial condition. This risk is inherent to the business of banking. Section 305 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), Public Law 102–242, requires the Banking Agencies to revise their risk-based capital guidelines to take adequate account of IRR. FDICIA also requires the Banking Agencies to publish final regulations implementing section 305 and to establish transition rules to facilitate compliance with those regulations.

Section 305(b)(2) of FDICIA requires the Banking Agencies to discuss the development of comparable standards with members of the supervisory committee of the Bank for International Settlements (BIS), which has also been working on ways to incorporate IRR into the risk-based capital standard. The Banking Agencies are actively participating in that international effort. However, the time required for developing and implementing an international standard is uncertain and an international standard is as yet unavailable.

In implementing section 305 of FDICIA, the Banking Agencies seek to create a viable system for measuring IRR, while at the same time continuing

to work with international organizations to develop consistent international capital standards. Many elements of the supervisory measurement system proposed in this notice are consistent with, although not identical to, key elements of the approach being pursued internationally. At the time that an international agreement emerges, the Banking Agencies will revisit this approach in light of the international standard. Such reevaluation may occur during the biennial review of capital standards that is required by section 305 of FDICIA.

Comments are requested on all aspects of this proposal. Issues on which comment is specifically requested are identified in numbered questions in section D.

2. Advance Notice of Proposed Rulemaking (ANPR)

In August 1992, the Banking Agencies issued an ANPR soliciting comments on a framework for revising their risk-based capital standards to take adequate account of IRR, as well as approaches to address the risks arising from credit concentrations and nontraditional activities (57 FR 35507, August 10, 1992). The ANPR outlined a possible IRR measurement system and asked for comments on that system, including its use as a basis for determining a capital requirement.

The framework outlined was designed to ensure that banks with significant levels of IRR would have sufficient capital to cover their exposure. IRR exposures were quantified by a proposed supervisory risk measure that sought to estimate the economic effect of an interest rate change on the present value of a bank's net worth, rather than the effect on current or near-term earnings. This measure required banks to slot their assets, liabilities, and off-balance-sheet instruments into a maturity schedule based on each instrument's remaining contractual maturity or next repricing date. The proposed maturity schedule used six maturity ranges or time bands, with balances in each time band weighted by a risk factor, or "risk weight," that estimated the price sensitivity of the instrument to changes in market interest rates. The summation of these weighted values, the "Net Risk-Weighted Position," was used to estimate the change in a bank's equity value for a 100 basis point change in interest rates. This measure was to serve as the basis for determining a bank's IRR exposure for capital adequacy purposes. To mitigate concerns about the imprecision in measuring IRR and to recognize that some degree of IRR is inherent in banking activities, only those banks with relatively significant measured exposure would have been required to allocate capital for IRR. As proposed, banks with exposures in excess of a "threshold" level of measured risk equal to plus or minus 1.0 percent of assets were required to allocate capital in an amount equal to that excess exposure.

3. Responses to the ANPR

The Banking Agencies collectively received a total of 214 responses to the ANPR. Of these, 182 addressed the proposed framework for IRR while 32 addressed only issues relating to credit concentrations or nontraditional activities.

The letters on the IRR proposal expressed a wide and diverse range of opinions. Most commenters recommended modifications to, or expressed concern with, some aspect of the proposal. Many commenters acknowledged the need for the Banking Agencies to monitor and evaluate the level of interest rate risk taken by banks. However, many commenters did not believe that the framework, as proposed, would lead to more effective supervision of IRR. As a result of these comments and further analysis, the Banking Agencies have modified the framework outlined in the ANPR in important ways. The public comments and key changes are summarized below.

a. Public Comments

Most respondents focused on the use of the measure as the basis for determining a regulatory capital requirement for IRR. Many urged greater discretion and flexibility in its use and recommended that it be used as an examiner tool, rather than as the basis for a capital charge. Many institutions believed that the precision of the measure should be enhanced if it is to be used to determine a capital charge. Therefore, they requested greater sophistication in some areas which would increase complexity and require more information. Others, however, cited concerns with the complexity and reporting burden of the measure and requested an exemption test to exclude banks with low IRR from added reporting or capital requirements.

Many commenters argued against a standard supervisory model and set of assumptions for measuring IRR, often citing the diversity within the commercial banking industry caused by the size, location, or general nature of each bank's activities. Many institutions also cited the greater accuracy of their own risk measurement models and urged the Banking Agencies to rely more heavily on them. Some cautioned that imposing a capital charge based on a supervisory model might cause some institutions to make decisions in deference to that model even though the bank's internal analysis might indicate that other actions were advisable.

Many respondents also stated that certain assumptions made in the supervisory model were improper for their institutions and perhaps for the industry as a whole. For example, many criticized the proposed treatment of deposits that do not have specified maturities (referred to as non-maturity deposits). These deposits can be withdrawn at any time but are typically rather stable both in price and volume. They include demand deposits, money market demand accounts (MMDA), negotiable order of withdrawal (NOW) accounts, and savings deposits. Other comments regarding specific aspects of the proposed supervisory model included criticisms and recommendations on the interest rate scenario used and the construction of the risk weights.

b. Responses to Comments

In response to the comments received, the Banking Agencies are proposing a measurement of IRR exposure with major changes from that in the ANPR and are considering two alternative uses of the measured exposure. Major changes are summarized below. However, other changes also have been incorporated to increase accuracy or reduce regulatory burden.

(1) A proposed quantitative screen would exempt banks identified as potentially low-risk institutions from additional reporting and, most likely, from any capital requirement for IRR.

(2) Use of a bank's internal risk measure would be permitted for evaluating IRR when the methodology and key assumptions of that measure are deemed adequate by the appropriate Banking Agency. Examination guidelines and analytical tools would be provided to examiners for this purpose. Banks would be expected to maintain appropriate internal risk measurement systems consistent with their risk profiles.

(3) Various refinements have been made to the supervisory measure that would be used to evaluate IRR for non-exempt banks where internal models are not available or are deemed inadequate. These modifications include changes to the method for determining risk weights, the specific treatment of non-maturity deposits, the reporting of amortizing and non-amortizing financial instruments, and the addition of another time band to provide for greater

accuracy and consistency with existing Call Report information.

B. Discussion of Proposal

1. Overview

The Banking Agencies propose to modify their existing risk-based capital standards to provide for the explicit consideration of IRR when assessing the capital adequacy of an institution. This proposal addresses two elements: A measure of IRR exposure and an approach for assessing capital adequacy for IRR. Exposures to IRR would be measured as the effect that a specified change in market interest rates would have on the net economic value of a bank.[1] This economic perspective considers the effect that changing market interest rates may have on the value of a bank's assets, liabilities, and off-balance-sheet positions.

The Banking Agencies propose to measure an institution's exposure using either a supervisory model or the bank's own internal model. In either case, the results could be used in one or two ways when assessing capital adequacy for IRR. One approach would be to reduce an institution's risk-based capital ratios by an amount based on the level of measured risk. The other would be to use the measured exposure as only one of several factors in assessing the need for capital. The measurement systems and their possible uses are discussed in greater detail in sections that follow.

a. Structure of the Supervisory Model

The supervisory model would require banks to report their assets, liabilities and off-balance-sheet positions into time bands based upon their remaining maturities or nearest repricing dates. Each position would then be multiplied by an IRR "risk weight" developed by the Banking Agencies that represents the estimated sensitivity of the economic value of that position to a specified change in market interest rates. The risk-weighted positions of all balances would be summed to produce a net risk-weighted position. This net position represents the estimated change in the bank's net economic value and would be the primary quantitative measure used to assess a bank's level of IRR.

To avoid collecting information about the maturities, cash flows, coupons, and yields of each bank's assets, liabilities, and off-balance-sheet positions, the risk weights would be developed using hypothetical instruments that are deemed to be representative of the position being weighted. The risk weights developed would be the percentage change in the present value of those hypothetical instruments for the given interest rate change.

The structure, reporting requirements, and key assumptions of the model are discussed in section 3 below. The Banking Agencies believe that this basic measure can be useful for supervisory purposes in evaluating the IRR of many banks. However, the Banking Agencies recognize that this basic model would not offer the precision of many acceptable internal models and that certain types of financial instruments have risk profiles that may be difficult to incorporate accurately into this basic model. For these reasons, the Banking Agencies are proposing to make use of a bank's own model, if it is deemed accurate.

b. Use of a Bank's Internal Model

The Banking Agencies recognize that many banking institutions have sophisticated internal models for measuring IRR that take account of complexities not addressed in the basic supervisory model and that are tailored to circumstances at each bank. Consequently, the Banking Agencies propose to make use of a bank's own IRR model if it is deemed adequate by examiners. To make this determination, examiners would consider the types of instruments held or offered by the bank, the integrity of the data, and whether the assumptions and relationships underlying the model are reasonable.

The supervisory model and other analytical tools could be used to assist examiners in evaluating the adequacy of a bank's internal model. The other analytical tools would be developed by the Banking Agencies over time. Such tools might include an options-pricing model to assist in the evaluation of explicit and embedded option products and the capability to use more detailed coupon and maturity information in estimating market value sensitivities. As experience is gained with the basic model and these supplemental tools, the Banking Agencies may seek to refine the basic measure to include additional or more sophisticated measurement methodologies or models.

When examiners determine that the risk profile generated by a bank's internal model is an adequate measure of the bank's risk position, that measure would be used for supervisory purposes. The bank, however, would continue to report the proposed expanded Call Report information used in the supervisory model. In banks without internal models, examiners would reply on the supervisory model. If warranted by the size and complexity of the bank's activities, however, examiners may require an institution to have an adequate internal model in the interest of bank safety and soundness. This approach should create incentives for banks to improve their ability to measure risk.

When reviewing a bank's internal model, examiners would evaluate its analytical approach and underlying assumptions. To the extent the model contains material weaknesses or its assumptions are judged to be unreasonable, examiners may require the bank to modify its procedures before judging the model to be acceptable or, alternatively, may rely on results of the supervisory model. At a minimum, examiners would identify the components of an internal model that incorporate assumptions or calculations that differ significantly from those used in the supervisory model, assess the importance of these differences, and then determine whether the bank has a sufficient basis for its treatment. Examiners would also monitor changes to an institution's assumptions or calculation procedures over time in order to assure the on-going integrity of the measure.

If the Minimum Capital Standard approach is adopted, an institution may be required to base that calculation on the results of a more sophisticated internal model, if available. Such an institution would not be permitted to use the basic supervisory model to determine its exposure for capital purposes, but rather would have to use an internal model. This requirement would be based upon the size and complexities of an institution's activities and would reflect the recognition that the supervisory model may not fully capture the risks of certain types of financial instruments or activities. The Banking Agencies seek comment on the appropriateness of such a requirement and on the types and scopes of activities that should trigger it.

c. Threshold Level

When evaluating a bank's need for capital IRR, the Banking Agencies propose to focus on institutions with relatively high levels of measured risk. This focus on "outliers" reflects that view that a certain amount of IRR is inherent and appropriate in commercial banking, that the level of risk is difficult to measure precisely, and that IRR has not been a principal threat to the financial health of commercial banks in the past.

[1] The change in an institution's net economic value is defined as the change in the present value of its assets minus the change in the present value of its liabilities plus the change in the present value of its off-balance-sheet positions.

A threshold level representing a decline in net economic value equal to 1.0 percent of assets is proposed to account for measurement imprecision and some amount of IRR implicit in the current risk-based capital standard. Measured exposures resulting in a decline in value of less than the 1.0 percent of assets level would generally be considered insufficient to require capital, although examiners could determine otherwise in unusual circumstances. The Banking Agencies may need to reconsider this proposed threshold level when other aspects of the proposal have been decided. Moreover, since the threshold exists in part to account for measurement imprecision, the Banking Agencies also request comment on the merits of using a lower threshold when results of more accurate internal models are used to evaluate IRR.

d. Reporting Requirements

While the regulatory changes proposed are expected to result in changes to the Call Report, no paperwork changes are specifically contained in this rule. The examples of Call Report schedules are provided to assist the reader in analyzing the full implications of the proposal. They are not intended as proposed forms. However, realistically, if the agencies adopt the final rule substantially as proposed, the resulting changes to the Call Report will probably be similar to the models provided and to what is recommended by the Banking Agencies to the Federal Financial Institutions Examination Council (FFIEC). The agencies will submit any Call Report changes to OMB for review as required under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). Opportunity for public comment is always provided in relation to such a submission. Nevertheless, the agencies invite comments regarding the paperwork implications of this notice of proposed rulemaking, and will carefully consider any comments received in the development of the final rule, as well as in the development of proposed revisions to the Call Report.

To collect the information necessary to monitor the level of IRR and assess the need for additional capital at banks that may have significant exposures, the Banking Agencies believe that additional Call Report information will be needed. Accordingly, the Banking Agencies seek comment on a Call Report schedule currently under consideration which would provide information necessary for calculating the supervisory measure. The FDIC would also replace supplemental Schedule RC–J, currently completed only by FDIC-supervised savings banks, with this new Call Report schedule. All FDIC-supervised savings banks would complete the new Call Report schedule and would not be afforded the reporting exemption as described in section E below. Comment is also requested on a second schedule that would be completed only by banks that elect or that may be required to use the results of their internal models. This second schedule would be required only if the Banking Agencies relied on the information to provide an explicit capital charge for IRR and would not be needed if the measured exposure was considered only as one element of broader guidelines for assessing capital adequacy for IRR.[2]

The proposed reporting schedules (Schedules 1 and 2) are illustrated and discussed in sections 3 and 4 below.

e. Reporting Exemptions

To minimize the reporting and other regulatory burdens associated with this proposal, the Banking Agencies propose to exempt from any additional reporting requirements institutions that meet certain criteria associated with "low-risk" institutions. The Banking Agencies propose that an institution would have to meet the following two criteria to qualify for such an exemption:

(1) The total notional principal amount of all of the institution's off-balance-sheet interest rate contracts[3] does not exceed 10 percent of its total assets; and

(2) 15 percent of the sum of the institution's fixed- and floating-rate loans and securities that mature or reprice beyond 5 years is less than 30 percent of its total capital.

The first criterion evaluates whether an institution has a significant amount of off-balance-sheet obligations that may warrant further scrutiny. The second criterion tests whether a significant decline in the market value of those assets most exposed to changing interest rates would reduce the institution's capital substantially.

To qualify for the reporting exemption, banks would need to meet these criteria at each quarterly Call Report date. Based on data for December 31, 1992, approximately 8,400 institutions with about 30 percent of U.S. commercial bank assets would meet these criteria. However, the Banking Agencies reserve the right to require an institution to report the additional information even if the institution satisfies these criteria. If a previously exempted bank fails to meet these criteria, or otherwise becomes non-exempt, it would be required to report the additional data at the next two Call Report dates, regardless of its future exemption status. Therefore, exempted banks would need to ensure that they are able to provide the requested information, if necessary.

Although exempted banks would not be required to report any additional data, they would be expected to maintain adequate policies and procedures for measuring, controlling, and managing interest rate risk.

f. Implementation Schedule

The Banking Agencies propose to require the additional reporting by non-exempt banks beginning with the March 1994 Call Reports. Full implementation of the guidelines for assessing the adequacy of bank capital would be effective December 31, 1994. However, the Banking Agencies also propose that examiners apply these standards on an advisory basis beginning with examinations commencing after December 31, 1993, to the extent that data are reasonably available.

Comments are requested on all aspects of the proposal, including the suggested implementation schedule.

2. Major Considerations in Measuring Interest Rate Risk

Obtaining meaningful results from either the supervisory or internal models requires appropriate treatment of three critical elements:

(1) The interest rate scenario used to measure the effect of changing rates;

(2) The asymmetrical rate sensitivity that results for certain bank products when both rising and falling interest rate scenarios are considered; and

(3) The treatment of non-maturity deposits, i.e., demand deposits, NOW and savings accounts, and MMDAs.

Another important consideration, especially when evaluating the risk of an individual bank that is part of a multi-bank holding company, is the relationship of that bank's exposure to positions held by its parent or other affiliated institutions. Each of these issues is discussed below.

a. Interest Rate Scenario

The interest rate scenario used to determine risk weights should cover an appropriate range of possible interest rate changes and reflect these factors:

(1) A time horizon over which institutions and supervisors can reasonably be expected to identify an institution's risk and implement

[2] The Banking Agencies may choose to treat the proposed second schedule as confidential.

[3] Off-balance-sheet interest rate contracts are those reported on Schedule RC–L items 11.a., 11.b., 11.c.(1) and 11.c.(2) of the Consolidated Report of Financial Condition.

meaningful and loss-limiting responses, taking into account both the frequency of reporting and examinations; and

(2) An appropriate probability of occurrence, as reflected by the historical volatility of market interest rates over the chosen time horizon.

The chosen time horizon is an important determinant of the size of the specified rate change. In general, a shorter time horizon implies a smaller potential rate change; generally, nominal rate changes based on quarterly time horizons are roughly one half of those derived from annual time horizons. A quarterly interval would correspond to the regulatory reporting cycle and may also allow sufficient time for bank management to identify and reposition an interest rate risk exposure.

However, an annual or semi-annual time horizon may better reflect the time necessary for management to recognize trends in interest rates and determine an appropriate response, and for the results of management's actions to be reflected to a material degree in the bank's positions. It may also be more appropriate than a quarterly time horizon given the sluggishness of non-maturity deposit rates to respond to market changes.

The Banking Agencies recognize that interest rate volatility varies with different maturities and that this volatility generally increases with the level of rates (i.e., that volatility is roughly proportional to the absolute level of rates).[4] Holding other factors the same, longer-term rates are typically less volatile than short-term rates.

	Monthly changes	Quarterly changes	Annual changes
3 Mo	.0711	.1515	.2149
1 Yr	.0542	.1358	.2665
2 Yr	.0574	.1200	.2327
5 Yr	.0468	.0976	.1953
7 Yr	.0424	.0880	.1827
10 Yr	.0393	.0810	.1733
30 Yr	.0346	.0721	.1590

The observed range of historical movements in interest rates over the selected time horizon will differ depending on the sample period used. Volatility experienced over a long sample period (e.g., the past 15 years) could be significantly different from that experienced over a shorter sample period (e.g., the prior 3 to 5 years). Longer sample periods could be used to ensure that the estimated volatilities reflect the full range of potential changes in rates over entire interest rate cycles and thus, might be more representative than shorter sample periods. On the other hand, shorter and more recent sample periods would better reflect prevailing rates and volatilities.

The Banking Agencies solicit comments on the appropriate time horizon, volatility measure and historical sample period to use in developing an interest rate scenario for assessing interest rate risk exposures. Specifically, comments are sought on alternative methodologies for determining scenarios. The first alternative measures historical volatility using nominal basis point changes in market rates. For example, a change in the 6-month rate from 3.0 percent to 3.5 percent would be measured as a movement of 50 basis points, as would a change from 10.0 percent to 10.5 percent. Scenarios would be based on two standard deviations (covering 95 percent of the observations) of quarterly basis point changes over a selected sample period—for example, 5 years.

A second alternative measures historical volatility as a proportion by which rates change. For example, the same increase from 3.0 to 3.5 percent would be measured as a movement of 16.6 percent of the initial rate (i.e., 0.005/0.03) whereas the increase from 10.0 to 10.5 percent would be measured as a change of 5 percent (0.005/.10).[5] Under this alternative, a volatility factor covering two standard deviations of the distribution of proportional rate changes over the sample period would be applied to the prevailing level of rates at each point along the yield curve. A 30.0 percent proportional rate change represents roughly two standard deviations of quarterly movements of 3-month instruments, or annual movements of 30-year instruments observed during the period 1977 to 1992. This "volatility factor" would produce a 90 basis point change if applied to a market rate of 3.0 percent (0.300.03). The same factor, if applied to a 10.0 percent market rate, would produce a 300 basis point change (0.300.10).

Possible interest rate scenarios using both alternative methods and quarterly and annual time horizons are shown below:

Maturity	Scenarios using nominal change		Scenarios using proportional change	
	Quarterly horizon (Col. 1)	Annual horizon (Col. 2)	Quarterly horizon (Col. 3)	Annual horizon (Col. 4)
0–3 Months	115 bp	320 bp	100 bp	190 bp
3–12 Months	120 bp	300 bp	100 bp	190 bp
1–3 Years	130 bp	250 bp	110 bp	210 bp
3–5 Years	125 bp	200 bp	115 bp	235 bp
5–10 Years	110 bp	170 bp	110 bp	235 bp
10–20 Years	100 bp	140 bp	110 bp	235 bp
Over 20 Years	80 bp	130 bp	110 bp	240 bp

Columns 1 and 2 illustrate scenarios using nominal changes in rates for a quarterly and an annual time horizon, respectively, as exhibited during the past five years. Columns 3 and 4 illustrate the rate changes derived using volatility factors for quarterly and annual time horizons, respectively, applied to the average level of rates during the fourth quarter of 1992. The relative uniformity of rate changes across the term structure under the proportional methodology (columns 3 and 4) reflects the steepness of the yield curve during that quarter; the sharply

[4] Based on the following standard deviations of the percent change in rates on U.S. Treasury securities estimated over the period 1977 to 1992, one standard deviation of annual rate changes in the 3-month Treasury Bill is approximately 29.5% of the outstanding 3-month Bill rate. One standard deviation of annual changes for the 30-year U.S. Treasury bond is roughly 15.9% of the prevailing 30-year bond rate. The corresponding absolute changes in rates depend on the level of rates to which the percent change is applied.

[5] Under current industry convention, proportional volatility is expressed as a percent change in the level of a given market interest rate. This can create some confusion, in that it represents a "percent of a percent." Alternatively, the volatility can be considered to be a multiple of the level of a market rate (e.g., 30 percent of the rate is the same as .30 of the rate).

higher level of longer-term rates more than offsets the effect of their lower proportional volatility. A less steep yield curve would generally produce smaller changes for long-term rates than those for short-term rates.

Currently, the results under either proposed methodology indicate rate changes that are about 100 basis points using a quarterly time horizon and 200 basis points using annual volatilities. In the interest of simplicity, the Banking Agencies also seek comment on the use of a parallel 100 or 200 basis point shift. For purposes of this proposed rulemaking, a simple 200 basis point shift is illustrated in the proposed amendments to the regulations of the Banking Agencies.

Whichever rate scenario is selected, the rate change would be treated as an instantaneous movement in market interest rates and would be used for both the supervisory and internal models for purposes of assessing capital adequacy. The selected rate scenario would be reconsidered periodically as market conditions change. However, it is the intent of the Banking Agencies to minimize changes to the specified scenarios. Therefore, barring extenuating circumstances, the Banking Agencies propose to make changes to the specified scenarios no more frequently than annually.

b. Rising and Falling Rate Scenarios

Another issue is whether the Banking Agencies should evaluate IRR under scenarios reflecting both rising and declining market interest rates. The interest rate sensitivity of many financial instruments can differ, in amount, under rising and declining rate scenarios. This difference can reflect differences in consumer behavior as well as management's pricing strategies. Evaluating exposures for both rising and declining rate scenarios would allow consideration of the asymmetry in a bank's assets, liabilities and off-balance-sheet items. Although banks can face potential losses in economic value under either situation, historically a rising rate environment has been more threatening to depository institutions. Important exceptions include institutions that have purchased large amounts of mortgage servicing rights, that hold large volumes of certain types of high-risk mortgage derivative instruments, or that have created certain types of exposures in off-balance-sheet positions.

One possible approach, reflected in the proposed rule, would be to evaluate exposures to both rising and declining rates. Internal models could estimate the change in economic value for both scenarios. For the supervisory model, different risk weights would be used for the rising and declining rate scenarios to reflect the asymmetric behavior of certain instruments. In the interest of avoiding complexity, another approach would be to consider only the risk of rising rates in the supervisory model and to address exposure to declining rates during on-site examinations. Comments are requested regarding the burden associated with either approach.

c. Treatment of Non-Maturity Deposits

The treatment of deposits without specific maturity or repricing dates may be one of the most important elements in calculating an institution's level of IRR exposure, whether an internal model or the basic supervisory measure is used. For purposes of calculating the supervisory measure, the Banking Agencies propose to permit banks limited flexibility in distributing their non-maturity deposits among time bands. Within these limits, banks would distribute the balances as they believe most appropriately reflects the price sensitivity of these deposits. Banks using their own models would be subject to the same effective maturity ranges when estimating the sensitivity of their deposits. Details on the proposed maturity ranges that would be allowed are provided in section 3 below under the discussion of "Reporting for Non-Maturity Deposits."

Considering the inherent difficulties in determining the appropriate treatment of non-maturity deposits, the Banking Agencies solicit comment and any relevant empirical evidence on the price sensitivity and market valuation of these deposits. Information relevant to assessing the changes in the market value of these deposits relative to changing interest rates would be most helpful. The Banking Agencies also seek comment on whether banks that have well reasoned and documented calculations showing rate sensitivities that are outside the proposed supervisory ranges should be allowed to use those calculations. Of particular interest are the specific types of analyses that should be required from banks to support such calculations.

d. Multi-bank Holding Companies

Banking organizations manage the IRR of their bank and nonbank subsidiaries in a variety of ways. Techniques include managing risk separately for each subsidiary depository institution and nonbank affiliate, on a consolidated basis for all banking entities, or on a fully consolidated basis for the holding company and all its subsidiaries.

Although recognizing these diverse practices, the Banking Agencies propose that each subsidiary depository institution report its assets, liabilities and off-balance-sheet positions separately (provided that the subsidiary is not exempted from the reporting requirement based on the criteria described in section 1 above). Multi-bank holding companies that use their own models also would need to calculate the exposure of each individual bank, although the actual calculation could be done by staff at the corporate or lead-bank level. This procedure will allow the Banking Agencies to monitor the IRR exposure of individual banks and to evaluate the ability of the banks to manage their measured levels of risk. This approach seems most consistent with the structure of existing capital standards and legislative requirements.

3. Description of Supervisory Model

a. General Comments

This section describes the structure, possible reporting requirements, and key assumptions and procedures of the proposed supervisory model. The measurement system is designed to minimize reporting burdens while meeting the supervisory need to estimate the extent to which the net economic value of an institution would change under a specified change in market interest rates. As such, it is not intended to replace other, more sophisticated procedures that banks may use in their risk management process.

A key component of the proposed supervisory system is a set of "risk weights" that—when applied to reported asset, liability and off-balance-sheet positions—estimates the sensitivity of the present value of each position to a specified change in interest rates. The sum of all weighted values of a bank's assets, liabilities and off-balance-sheet positions represents the amount by which the bank's net economic value is estimated to change, given an assumed change in interest rates. This number, called the "Net Risk-Weighted Position", is the primary quantitative measure that would be used to evaluate an institution's exposure to IRR.

b. Information Requirements

Use of the supervisory measurement system requires information on the maturity and repricing characteristics of an institution's assets, liabilities and off-balance-sheet positions. As described in section 1 above, an IRR reporting exemption would be granted to

institutions meeting certain criteria. Non-exempt institutions and FDIC-insured savings banks would be required to report maturity and repricing information for both on- and off-balance-sheet items in a Call Report schedule such as that illustrated in Schedule 1. Non-exempt commercial banks would no longer need to report the similar maturity and repricing data currently collected on the memoranda items of Schedules RC–B, RC–C, and RC–E. Exempt institutions with the exception of FDIC-insured savings banks, however, would continue to report these memoranda items.

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

Proposed Interest Rate Risk Schedule

DRAFT

Schedule 1

(to be completed by non-exempt institutions only)

Maturity and repricing data:
Please break out the following items according to their remaining term to maturity or time to repricing:

Dollar Amounts in Thousands	Total			Up to 3 months			> 3 months and < = 1 year			> 1 year and < = 3 years			> 3 years and < = 5 years			> 5 years and < = 10 years			> 10 years and < = 20 years			> 20 years		
	Bil	Mil	Thou	Bil	Mil	Thou	Bil	Mil	Thou	Bil	Mil	Thou	Bil	Mil	Thou	Bil	Mil	Thou	Bil	Mil	Thou	Bil	Mil	Thou
1. Securities:																								
a. Adjustable-rate mortgage securities		1	000			0		1	000			0			0									
b. Fixed-rate mtgs, asset-backed securities		11	750			0			0		1	100			0			0		3	250		7	400
c. Zero or low coupon securities		3	000		1	000		1	000		1	000			0			0			0			0
d. High-risk mortgage securities		3	000																					
e. All other securities		59	208		7	000		12	150		4	475		6	720		10	564		8	837		9	462
2. Loan and Leases:																								
a Adjustable-rate mortgages		6	000		4	000		2	000			0			0									
b. Fixed-rate mtg, consumer loans		23	420		1	500		1	950		2	950		4	166		6	620		3	204		3	030
c All other loans (C&I, etc.)		61	198		15	672		11	382		21	136		13	008			0			0			0
3. All Other Int-Bearing Assets (Bal. Due, Fed Funds)		1	450		1	450			0			0			0			0			0			0
4. Liabilities:																								
a. Time deposits		71	070		21	433		31	862		8	621		9	090		64				0			0
b. All other (include repos and sub. debt)		14	258		1	650		6	433		6	175			0			0			0			0
c. MMDAs & DDAs - rising rates		59	287			0		36	287		23	000			0			0			0			0
d NOWs & savings - rising rates		21	525			0			0		13	525		8	000			0			0			0
e. MMDAs & DDAs - declining rates		59	287		11	500		36	287		11	500			0			0			0			0
f. NOWs & savings - declining rates		21	525		4	000		3	000		13	525		1	000			0			0			0
5. Off-Balance-Sheet Positions																								
a Swaps, futures, FRAs, etc			0		3	000			500		-3	050			-450			0			0			0
b Options, caps, floors, etc			0		1	000			0		-1	000			0			0			0			0
c. Mortgages & other amortizing instruments			0		1	000			0		-1	000			0			0			0			0
6. Trading Account																								
a. Cash positions		12	975		2	550		4	900		5	525			0			0			0			0
b. Off-balance-sheet positions			0			0			0			0			0			0			0			0

Memoranda	Carrying Value			Rising Rates			Declining Rates		
1. High-Risk Securities Evaluated		2	000		2	160		1	800
2. High-Risk Securities Not Evaluated		1	000						

Revision Date: 09/02/93

BILLING CODE 4810-33-C; 6210-10-C; 6714-01-C

The reporting format being proposed would require institutions to report assets, liabilities and off-balance-sheet items across seven maturity ranges (time bands) based on the time remaining to maturity or next repricing date. The proposed time bands are:

- Up to 3 Months,
- 3 to 12 Months,
- 1 to 3 Years,
- 3 to 5 Years,
- 5 to 10 Years,
- 10 to 20 Years,
- Greater than 20 years.

In the interest of minimizing reporting burdens, no coupon or yield data would be collected. Rather, the supervisory model would apply general assumptions regarding coupon rates and other characteristics of the underlying assets, liabilities, and off-balance-sheet instruments in developing the interest rate sensitivity weights. When used as an alternative, internal models would be expected to reflect actual coupons and yields of the specific holdings of the institution.

Reporting for assets. The price sensitivity of a financial instrument is determined by the instrument's cash flow characteristics. Accordingly, maturity and repricing data on most assets would be collected in one of four categories that reflect different types of cash flows:

- Adjustable-rate mortgages (ARMs) and mortgage securities;
- Fixed-rate mortgage securities, asset-backed securities, fixed-rate mortgages, consumer loans and other easily identifiable instruments that involve scheduled periodic amortization of principal;
- Zero or low coupon securities with either no periodic interest payments or interest coupons of 2 percent or lower; and
- All other instruments, which are assumed to involve scheduled periodic payments of interest and the payment of principal at maturity.

As proposed, those ARMs tied to a current market index (e.g., Constant Maturity Treasury rates) would be reported in the time band according to their next repricing date. ARMs tied to a lagging index (e.g., 11th District Cost of Funds) have greater price sensitivity owing to the lagging nature of their repricing behavior. These instruments would be reported in the 3 to 5 year time band to reflect this price sensitivity.

Only outstanding principal balances would be distributed across the time bands. This distribution would be based on each instrument's remaining contractual maturity or repricing date. A bank's own estimate of expected cash flows would not be reported. Instead, the Banking Agencies would incorporate the rate of anticipated prepayments on amortizing instruments, such as residential mortgages and mortgage pass-through securities, into the IRR risk weights using standardized assumptions and market expectations.

Mortgage derivative products would be treated differently. Under the FFIEC Policy Statement on Securities Activities, mortgage derivative products are defined as stripped mortgage-backed securities, tranches of collateralized mortgage obligations (CMOs) and real estate mortgage investment conduits (REMICs), CMO and REMIC residual securities and other instruments having the same characteristics as these securities. In general, banks would report "high-risk" mortgage derivative products differently from those that are "nonhigh-risk."[6] Banks would report only the total carrying value of "high-risk" mortgage derivative products that are held for sale. A memorandum item would be used to collect information on the interest rate sensitivity of these instruments. All other mortgage derivative products would be classified as "nonhigh-risk" and would be distributed across the time bands of the proposed reporting form, in the "All Other Securities" category, according to their current average life as calculated by bank management.[7]

Time deposits held at other institutions, Federal funds sold, Securities Purchased Under Agreement to Resell (i.e., reverse repurchase agreements) and other interest-bearing assets would also be reported in the proposed reporting form as a single line item.

Reporting for time deposits and purchased funds. All time deposits and other interest-bearing liabilities with well-defined maturities—such as Federal funds purchased, securities sold under agreement to repurchase and other borrowed funds—would be distributed across the time bands of Schedule 1 in the "All Other" category.

Reporting for non-maturity deposits. The Banking Agencies are proposing uniform rules for distributing deposits without well-defined maturities or repricing dates (demand deposits, MMDAs, NOWs and savings deposits) across the time bands. These proposed rules would specify the longest time band that could be used for each type of deposit and the maximum percentage amount that could be slotted into that time band. Institutions would distribute such deposits across the time bands according to their individual assumptions and experience, subject to the following constraints:

- Demand deposits and MMDAs may be distributed across any of the first three time bands, with a maximum of 40 percent of these balances in the 1 to 3 year time band; and
- Savings and NOW account balances may be distributed across any of the first four time bands, with a maximum of 40 percent of the total of these balances in the 3 to 5 year time band.

As was noted in section 2 above, the Banking Agencies are proposing to measure a bank's IRR exposure under both a rising and falling rate scenario These deposit slotting rules would allow an institution some flexibility to slot deposits with undefined maturities differently for rising and falling rate scenarios.

Reporting for off-balance-sheet positions. Institutions would be required to distribute off-balance-sheet positions among the time bands of Schedule 1. The Banking Agencies expect banks that engage in a significant amount of off-balance-sheet activities to have internal systems, including options pricing models as appropriate, that can properly value the types of transactions they use in their risk management activities. Accordingly, the Banking Agencies propose to allow banks to estimate the interest sensitivity of off-balance-sheet instruments using internal models. If a separate Call Report schedule for reporting internal model results is not adopted or required (see discussion in section 4 below), the

---

[6] Effective February 10, 1992 the Banking Agencies and the Office of Thrift Supervision adopted revised supervisory policies on securities activities that were developed under the auspices of the FFIEC. The revised policies established a framework for identifying "high-risk mortgage securities" which must be reported as securities held for sale or for trading. A "high-risk mortgage security" is defined as any mortgage derivative product that, at the time of purchase, or at a subsequent date, meets any of the following tests:

(1) *Average Life Test:* The mortgage derivative product has an expected weighted average life greater than 10.0 years.

(2) *Average Life Sensitivity Test:* The expected weighted average life of the product:

(a) Extends by more than 4.0 years, assuming an immediate and sustained parallel shift in the yield curve of plus 300 basis points, or

(b) Shortens by more than 6.0 years, assuming an immediate and sustained parallel shift in the yield curve of minus 300 basis points.

(3) *Price Sensitivity Test:* The estimated change in the price of the mortgage derivative product is more than 17 percent, due to an immediate and sustained parallel shift in the yield curve of plus or minus 300 basis points.

In general, a mortgage derivative product that does not meet any of the three tests is considered to be a "nonhigh-risk mortgage security."

[7] All underlying assumptions used in calculating the average life of these instruments must be reasonable and available for examiner review. For example, if an institution's prepayment assumptions differ significantly from the median prepayment assumptions of several major dealers as selected by examiners, the examiners may use these median prepayment assumptions in determining the appropriate average life of the instrument.

results of these internal models could be incorporated as a memorandum item on Schedule 1. These models would be reviewed by examiners as part of the examination process and exposures based on internal models would be used for supervisory purposes when available and deemed acceptable to the examiner. Comment is requested on the reporting burden associated with distributing off-balance-sheet positions among time bands, when results of internal models are also provided.

With regard to reporting off-balance-sheet positions in the proposed maturity reporting schedule, those with option characteristics (e.g., swaptions, caps, floors and options) would be reported separately from those representing firm commitments (e.g., swaps, futures, and forward-rate agreements). Mortgage-related fixed-rate commitments and other off-balance-sheet derivative instruments whose value depends on the value of an underlying asset or index with amortizing characteristics also would be reported separately.

Futures, forwards, options and firm commitments to buy or sell loans and securities would be reported using two entries, with one entry reported in the time band corresponding to the settlement date of the contract plus the maturity of the underlying instrument, and an offsetting entry of opposite sign slotted in the time band corresponding to the settlement date of the contract. Interest rate swaps, and floors would also be reported using two separate entries, with one entry reported in the time band corresponding to the maturity of the instrument and an offsetting entry in the time band corresponding to the next repricing of the floating side of the instrument.

The dollar entries reported for firm commitments would equal the national principal values of the instruments. The dollar entries reported for instruments with option characteristics would be derived using one of two alternative methods. The first method, reflected in the proposed rule, would require the reporting of positions using delta-equivalent values.[8] The second reporting alternative would require the reporting of position only if, on the report date, the index rate or the rate to be received is within 100 basis points of the strike rate (price). If the position is reported, the notional value would be used. Comment is requested on this reporting methodology as well as the use of delta-equivalent values for off-balance-sheet positions with option characteristics.

Reporting for trading account positions. Institutions would be required to distribute trading account securities, including off-balance-sheet positions associated with the trading account, by maturity in the rows and columns specified in Schedule 1. As with off-balance-sheet instruments, the Banking Agencies propose to allow banks to use and report the results of internal models for estimating the interest rate sensitivity of trading portfolios. This information would be collected either through the proposed separate Call Report schedule or through a memorandum item on Schedule 1. Comment is requested on the reporting burden associated with distributing trading account positions among time bands when results of internal models are also provided.

The Banking Agencies would expect banks to have prudential internal risk limits and effective risk measurement systems for their trading activities. For banks with significant trading operations, the adequacy and results of those systems will be closely reviewed by examiners and would be incorporated into their assessment of the bank's overall risk position.

The Basle Committee on Bank Supervision is also considering methods of evaluating IRR in trading accounts and determining appropriate capital requirements. This work, which relates to activities of internationally active banks could affect the treatment for trading activities for U.S. banks if it leads to an international agreement.

Memoranda items for "High-Risk Mortgage Securities". Under revised supervisory policies on securities activities that became effective on February 10, 1992, institutions must evaluate at least quarterly whether their holdings of high-risk mortgage securities reduce interest rate risk. The reporting form takes advantage of the availability of this information by allowing an institution to report, in a memorandum item, the current carrying value of high-risk mortgage derivative products that are held for sale along with the estimated changes in market value for the specified interest rate scenario. Such data would be used directly in calculating an institution's IRR exposure.

Mortgage derivative securities that were purchased prior to February 10, 1992 and meet the high-risk tests are subject to previously existing supervisory policies and are, therefore, not subject to the quarterly IRR risk evaluation criteria. For such holdings, institutions would have the option to: (1) Report the interest rate sensitivity of these holdings in a similar fashion as post-February 10, 1992, purchases; or (2) report only the current carrying value of those securities. Balances reported under the second option would be assumed to have significant price volatility, similar to long dated, zero or low coupon instruments. However, unlike zero coupon and most other debt instruments, the prices of certain high-risk mortgage securities do not always move in the opposite direction of a change in market interest rates (i.e., decline in price when interest rates rise or increase in price when interest rates decline). Because the directional change in the price of these securities is difficult to ascertain unless the specific cash flows of each security are reported, the Banking Agencies propose to assume that the balances reported under the second option will depreciate in value under both a rising and a falling interest rate scenario. To reflect this assumption, the balances would be assigned the risk weight that is applied to long-term, zero or low coupon securities under the rising interest rate scenario. The Banking Agencies request comment on the reasonableness of this approach. For illustrative purposes, the example bank in Schedule 1 that has $3 million in high-risk mortgage derivative securities has elected to report only the current carrying value for $1 million of securities that would otherwise meet the current high-risk tests but were purchased prior to February 10, 1992.

Reporting for multi-bank holding companies. As noted in section 2 above, the Banking Agencies propose that each subsidiary depository institution report its assets, liabilities and off-balance-sheet positions separately.

Reporting of foreign currency positions. The Banking Agencies propose that positions not denominated in U.S. dollars be converted into U.S. dollar equivalents using prevailing exchange rates and reported along with all other on- and off-balance-sheet positions on the same reporting form. Although this treatment ignores imperfect correlation among exchange rates, it avoids the complexity entailed by separate reporting for each currency, and the need to derive and distribute correlation statistics to reporting banks.

However, a basic supervisory principle in evaluating bank management is that an institution's policies, procedures and general capabilities should be consistent with the nature of the bank's business.

[8] The delta value of an option represents the expected change in the option's price as a proportion of a small change in the price of the underlying instrument. An option whose price changes by $1 for every $2 change in the price of the underlying instrument has a delta of 0.5. The delta-equivalent value of an option position is equal to the option's current delta multiplied by its principal or notional value.

Accordingly, examiners would expect institutions that have significant positions denominated in foreign currencies or that conduct significant foreign exchange transactions to have the capability to measure and assess the related risks. Examiners would consider both the adequacy and result of a bank's internal risk measure, along with other available information, in the overall evaluation of the bank's model. When appropriate, internal models should take adequate account of changes in foreign exchange rates.

c. Derivation of Risk Weights

In the proposed measurement system, reported positions would be multiplied by an IRR weight. Each risk weight is constructed to approximate the percentage change in value of the position resulting from a specified change in interest rates. The risk weights are based on the percentage change in present value (i.e., price) of hypothetical instruments, as calculated using static cash flow analysis. Such weights directly incorporate convexity for the rate scenario.[9] These weights also facilitate the measurement of options in certain types of assets, such as the prepayment option in mortgage loans.

The risk weights used would depend on the interest rate scenario for which the change is measured. As discussed above, comments are being sought on alternative methodologies for determining supervisory interest rate scenarios and whether these scenarios should include both rising and falling rates.

If both a rising-rate and declining-rate scenario are used, as reflected in the proposed rule, separate risk weights would be calculated to account for the asymmetrical price behavior of various bank assets, liabilities and off-balance-sheet instruments. An alternative and simpler approach would use the same risk weights for both rising and declining rate scenarios. The Banking Agencies seek comment on whether the distortions introduced by such a simpler approach are meaningful within the overall context of the supervisory model.

In general, the set of risk weights used for each scenario would consist of:

- Seven "Amortizing" risk weights (i.e., one for each time band) to be used for mortgages, pass-through mortgage securities, asset-backed securities, consumer loans and amortizing off-balance-sheet instruments;
- Seven "Zero or Low Coupon" risk weights;
- Seven "All Other" risk weights; and,
- Seven liability risk weights.

Bank supervisors would construct risk weights using hypothetical market instruments that are representative of the category being measured. The instruments chosen would vary depending on the category of instrument and the time band. A 30-year mortgage pass-through security with the composite characteristics (e.g., gross and net coupons, original and remaining maturity) of a current coupon, 30-year conventional mortgage pass-through security at par value would be used to estimate the price change for fixed-rate mortgages and mortgage securities reported in the greater than 20 year time band. Similarly, a current coupon 15-year conventional mortgage pass-through security would be used to estimate the risk weight for mortgages and mortgage securities reported in the 10 to 20 year time band. For the 5 to 10 year time band, a current coupon 15-year mortgage pass-through security with a remaining maturity equal to 7.5 years would be used.

For amortizing instruments with maturities less than 5 years, a hypothetical monthly amortizing instrument would be used that had these characteristics: (1) An original maturity equal to the end point of the specific time band; (2) a remaining maturity equal to the midpoint of the time band; and (3) a coupon and yield equal to the effective yield on the industry's earning assets.[10]

An important consideration in estimating the price sensitivity of amortizing instruments is the change in prepayments as interest rates change. In calculating the risk weights from the 15- and 30-year fixed-rate mortgages, expected prepayments would be applied in each rate scenario in accordance with a consensus of market prepayment estimates. Amortizing instruments with maturities of less than 5 years would be assumed to represent consumer installment loans with prepayment rates of approximately 1.0 percent (1 percent ABS) of outstanding principal per month.[11]

The risk weights for the "All Other" category would be calculated assuming semi-annual interest payments, a maturity equal to the mid-point of each time band, and an assumed coupon and yield equal to the effective yield on the industry's earning assets in 1992. Similarly, the "Zero or Low Coupon" risk weights are calculated using the percentage change in the price of a zero coupon instrument with an assumed maturity equal to the mid-point of each time band and the same industry average effective yield assumed above.

Only one set of risk weights would be used for liabilities: The percentage price change for a semi-annual interest-bearing instrument with an assumed coupon and yield equal to the effective yield on interest bearing liabilities.[12]

For illustrative purposes, Table 1 shows the risk weights developed for a 200 basis point parallel shift in interest rates, as well as the parameters used to derive them. The specific risk weights used to evaluate exposures would be derived in a similar fashion when the Banking Agencies adopt a specific supervisory scenario. In the illustration risk weights for both a rising and declining interest rate scenario have been constructed. Under the proposed measurement system, the Banking Agencies expect that the risk weights would be reasonably stable over time so as to facilitate a bank's risk management and capital planning. However, they may need to be adjusted periodically as market conditions, or as part of the biennial review of risk-based capital required biennial review of risk-based capital required by section 305(a) of FDICIA.

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

[9] Convexity refers to the non-linear price/yield relationship of fixed-rate financial instruments. Instruments without option features, such as Treasury notes, have positive convexity, meaning that as the price of the instrument falls, its yield will increase by a proportionately greater amount. Other instruments, such as certain mortgage-backed securities, have negative convexity.

[10] For 1992 the average effective yield on earning assets at all commercial banks was approximately 8.5 percent.

[11] ABS stands for Asset-Backed Security. 1 percent ABS assumes 1 percent prepayment of outstanding principal balance per month throughout the life of the loan.

[12] For the liability weights a 4.75 percent coupon is assumed, which approximates the effective yield on interest bearing liabilities at all commercial banks during 1992.

Derivation of Risk Weights

DRAFT

Table 1

Amortizing Instruments

Time band	Maturity	Coupon	Initial Price (% of Par)	Initial PSA/ ABS	Scenario 1: 200 Basis Point Rise — Expected PSA/ ABS	Scenario 1: 200 Basis Point Rise — Price (% of Par)	Scenario 1: 200 Basis Point Rise — % Change in Present Value (Risk Weights)	Scenario 2: 200 Basis Point Decline — Expected PSA/ ABS	Scenario 2: 200 Basis Point Decline — Price (% of Par)	Scenario 2: 200 Basis Point Decline — % Change in Present Value (Risk Weights)
0-3 Months	1.5 Mo.	8.5%	100.00%	1.0% ABS	1.0% ABS	99.90%	-0.10%	1.0% ABS	100.10%	0.10%
3-12 Months	7.5 Mo.	8.5%	100.00%	1.0% ABS	1.0% ABS	99.50%	-0.50%	1.0% ABS	100.60%	0.60%
1-3 Years	2 Years	8.5%	100.00%	1.0% ABS	1.0% ABS	98.40%	-1.60%	1.0% ABS	101.70%	1.70%
3-5 Years	4 Years	8.5%	100.00%	1.0% ABS	1.0% ABS	97.00%	-3.00%	1.0% ABS	103.10%	3.10%
5-10 Years	7.5 Years	7.0% *	100.00%	166% PSA ***	137% PSA ***	94.70%	-5.30%	501% PSA ***	103.40%	3.40%
10-20 Years	15 Years	7.0% *	100.00%	166% PSA ***	137% PSA ***	91.20%	-8.80%	501% PSA ***	105.90%	5.90%
Over 20 Years	25 Years	7.5% **	100.00%	242% PSA ***	146% PSA ***	90.80%	-9.20%	590% PSA ***	103.60%	3.60%

All Other Instruments

0-3 Months	1.5 Mo.	8.5%	100.00% ****			99.75%	-0.25%		100.25%	0.25%
3-12 Months	7.5 Mo.	8.5%	100.00% ****			98.80%	-1.20%		101.20%	1.20%
1-3 Years	2 Years	8.5%	100.00%			96.50%	-3.50%		103.70%	3.70%
3-5 Years	4 Years	8.5%	100.00%			93.60%	-6.40%		107.00%	7.00%
5-10 Years	7.5 Years	8.5%	100.00%			89.80%	-10.20%		111.70%	11.70%
10-20 Years	15 Years	8.5%	100.00%			85.10%	-14.90%		119.00%	19.00%
Over 20 Years	25 Years	8.5%	100.00%			82.40%	-17.60%		124.60%	24.60%

Liabilities

0-3 Months	1.5 Mo.	4.75%	100.00% ****			99.75%	0.25%		100.25%	-0.25%
3-12 Months	7.5 Mo.	4.75%	100.00% ****			98.80%	1.20%		101.20%	-1.20%
1-3 Years	2 Years	4.75%	100.00%			96.30%	3.70%		103.90%	-3.90%
3-5 Years	4 Years	4.75%	100.00%			93.10%	6.90%		107.50%	-7.50%
5-10 Years	7.5 Years	4.75%	100.00%			88.40%	11.60%		113.50%	-13.50%
10-20 Years	15 Years	4.75%	100.00%			81.30%	18.70%		124.50%	-24.50%
Over 20 Years	25 Years	4.75%	100.00%			76.00%	24.00%		136.00%	-36.00%

Zero or Low Coupon Securities

0-3 Months	1.5 Mo.	8.5%	98.97%			98.72%	-0.25%		99.22%	0.25%
3-12 Months	7.5 Mo.	8.5%	94.95%			93.81%	-1.20%		96.09%	1.20%
1-3 Years	2 Years	8.5%	84.66%			81.53%	-3.70%		87.96%	3.90%
3-5 Years	4 Years	8.5%	71.68%			66.38%	-7.40%		77.41%	8.00%
5-10 Years	7.5 Years	8.5%	53.56%			46.44%	-13.30%		61.92%	15.60%
10-20 Years	15 Years	8.5%	28.69%			21.55%	-24.90%		38.30%	33.50%
Over 20 Years	25 Years	8.5%	12.48%			7.74%	-38.00%		20.21%	61.90%

* Current coupon of 15-year conventional mortgage securities as of 12/31/92

** Current coupon of 30-year conventional mortgage securities as of 12/31/92

*** Consensus of dealer prepayment estimates for 15- & 30-year conventional mortgage securities for selected scenarios as of 12/31/92

**** Actual initial price is slightly less than par

Revision Date: 12-Jul-93

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

d. Calculation of the Interest Rate Risk Measure

Tables 2 and 3 are IRR worksheets that illustrate the method by which an institution's IRR exposure would be calculated under the proposed supervisory methodology using a 200 basis point parallel shift in interest rates. Data collected on the reporting forms and the existing Call Report Schedules would be transcribed to column A. For illustrative purposes, non-interest-sensitive balances are included in "Other Assets" and "Other Liabilities" to allow the worksheet to represent an institution's entire balance sheet.

Under the proposed measure system, the risk weights (shown in column B of Tables 2 and 3) represent the estimated percentage change in the value of the instrument under the designated rate shock. Therefore, multiplying the reported positions by the risk weights produces an estimate of the dollar change in the present value of that position for the specified change in rates (column C of the Tables). In Table 2, for example, the $5.5 million of ARMs, fixed-rate mortgages, asset-backed securities and consumer loans repricing within 3 months and reported on line I.1.(a) are multiplied or "weighted" by 0.0010 (or .10 percent as shown in the second column) to produce an estimated change of $6,000 in present value of that position. This risk weight carries a negative sign, reflecting that the present value of these assets would decline if market rates were to rise. Conversely, Table 3 illustrates the changes in value for a decline in rates.

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

Interest Rate Risk Worksheet (200 Basis Point Rising Rate Scenario)
DRAFT

Table 2

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	-0.10%	($6)	
(b) 3 to 12 months	$4,950	-0.50%	($25)	
(c) 1 to 3 years	$4,050	-1.60%	($65)	
(d) 3 to 5 years	$4,166	-3.00%	($125)	
(e) 5 to 10 years	$6,620	-5.30%	($351)	
(f) 10 to 20 years	$6,454	-8.80%	($568)	
(g) Greater than 20 years	$10,430	-9.20%	($960)	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	-0.25%	($3)	
(b) 3 to 12 months	$1,000	-1.20%	($12)	
(c) 1 to 3 years	$1,000	-3.70%	($37)	
(d) 3 to 5 years	$0	-7.40%	$0	
(e) 5 to 10 years	$0	-13.30%	$0	
(f) 10 to 20 years	$0	-24.90%	$0	
(g) Greater than 20 years	$0	-38.00%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	-0.25%	($67)	
(b) 3 to 12 months	$28,432	-1.20%	($341)	
(c) 1 to 3 years	$31,136	-3.50%	($1,090)	
(d) 3 to 5 years	$19,728	-6.40%	($1,263)	
(e) 5 to 10 years	$10,564	-10.20%	($1,078)	
(f) 10 to 20 years	$8,837	-14.90%	($1,317)	
(g) Greater than 20 years	$9,462	-17.60%	($1,665)	
4. High-risk mortgage securities				
(a) Self-reporting	$1,000		$100	
(b) Risk weighting	$1,000	-38.00%	($380)	
5. Total Interest-Sensitive Assets	$183,000		($5,190)	($9,190)
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$186,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$23,083	0.25%	$58	
(b) 3 to 12 months	$74,582	1.20%	$895	
(c) 1 to 3 years	$51,321	3.70%	$1,899	
(d) 3 to 5 years	$17,090	6.90%	$1,179	
(e) 5 to 10 years	$64	11.60%	$7	
(f) 10 to 20 years	$0	18.70%	$0	
(g) Greater than 20 years	$0	24.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		$4,038	
V. NONINTEREST-SENSITIVE LIABILITIES	$860			
VI. TOTAL LIABILITIES	$167,000		$4,038	$4,038
VII. EQUITY CAPITAL	$19,001			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	-0.25%	($10)	
(b) 3 to 12 months	$500	-1.20%	($6)	
(c) 1 to 3 years	($4,050)	-3.50%	$142	
(d) 3 to 5 years	($450)	-6.40%	$29	
(e) 5 to 10 years	$0	-10.20%	$0	
(f) 10 to 20 years	$0	-14.90%	$0	
(g) Greater than 20 years	$0	-17.60%	$0	
2. Mortgage and other amortizing contracts				
(a) Up to 3 months	$1,000	-0.10%	($1)	
(b) 3 to 12 months	$0	-0.50%	$0	
(c) 1 to 3 years	($1,000)	-1.60%	$16	
(d) 3 to 5 years	$0	-3.00%	$0	
(e) 5 to 10 years	$0	-5.30%	$0	
(f) 10 to 20 years	$0	-8.80%	$0	
(g) Greater than 20 years	$0	-9.20%	$0	
3. Total Off-Balance-Sheet Positions	$0		$170	$170
Net Risk Weighted Position				($4,981.86)
Net Position/ Assets				-2.68%

Interest Rate Risk Worksheet (200 Basis Point Declining Rate Scenario)
DRAFT
Table 3

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	0.10%	$6	
(b) 3 to 12 months	$4,950	0.60%	$30	
(c) 1 to 3 years	$4,050	1.70%	$69	
(d) 3 to 5 years	$4,165	3.10%	$129	
(e) 5 to 10 years	$6,620	3.40%	$225	
(f) 10 to 20 years	$6,454	5.90%	$381	
(g) Greater than 20 years	$10,430	3.60%	$375	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	0.25%	$3	
(b) 3 to 12 months	$1,000	1.20%	$12	
(c) 1 to 3 years	$1,000	3.90%	$39	
(d) 3 to 5 years	$0	8.00%	$0	
(e) 5 to 10 years	$0	15.60%	$0	
(f) 10 to 20 years	$0	33.50%	$0	
(g) Greater than 20 years	$0	61.90%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	0.25%	$67	
(b) 3 to 12 months	$26,432	1.20%	$341	
(c) 1 to 3 years	$37,136	3.70%	$1,152	
(d) 3 to 5 years	$19,728	7.00%	$1,381	
(e) 5 to 10 years	$10,564	11.70%	$1,236	
(f) 10 to 20 years	$8,837	19.00%	$1,679	
(g) Greater than 20 years	$9,462	24.60%	$2,328	
4. High-risk mortgage securities				
(a) Self-reporting	$2,000		$380	
(b) Risk weighting	$1,000	38.00%	($380)	
5. Total Interest-Sensitive Assets	$183,000		$8,871	$8,871
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$186,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$38,583	-0.25%	($96)	
(b) 3 to 12 months	$77,582	-1.20%	($931)	
(c) 1 to 3 years	$39,821	-3.90%	($1,553)	
(d) 3 to 5 years	$10,049	-7.50%	($754)	
(e) 5 to 10 years	$64	-13.50%	($9)	
(f) 10 to 20 years	$0	-24.50%	$0	
(g) Greater than 20 years	$0	-36.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		($3,346)	
V. NONINTEREST-SENSITIVE LIABILITIES	$850			
VI. TOTAL LIABILITIES	$167,000		($3,346)	($3,346)
VII. EQUITY CAPITAL	$19,001			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	0.25%	$10	
(b) 3 to 12 months	$500	1.20%	$6	
(c) 1 to 3 years	($4,050)	3.70%	($150)	
(d) 3 to 5 years	($450)	7.00%	($32)	
(e) 5 to 10 years	$0	11.70%	$0	
(f) 10 to 20 years	$0	19.00%	$0	
(g) Greater than 20 years	$0	24.60%	$0	
2. Mortgage and other amortizing contracts				
(a) Up to 3 months	$1,000	0.10%	$1	
(b) 3 to 12 months	$0	0.60%	$0	
(c) 1 to 3 years	($1,000)	1.70%	($17)	
(d) 3 to 5 years	$0	3.10%	$0	
(e) 5 to 10 years	$0	3.40%	$0	
(f) 10 to 20 years	$0	5.90%	$0	
(g) Greater than 20 years	$0	3.60%	$0	
3. Total Off-Balance-Sheet Positions	$0		($181)	($181)
Net Risk Weighted Position				$5,344.31
Net Portfolio Assets				2.87%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

The sum of the estimated changes in present value for each category of instrument provides an estimate of the institution's overall interest rate risk, that is, the change in the net economic value of the institution that would result from the specified shift in market interest rates. As shown in Table 2, the specified 200 basis point increase in rates is estimated to reduce the present value of the bank's assets by roughly $9.19 million, raise the present value of its liabilities by an estimate $4.04 million and raise the value of its off-balance-sheet items by $170,000. The net result, or the "Net Risk-Weighted Position" (bottom of the worksheet) is a decline of roughly $4.98 million in the net economic value of this institution. This net risk-weighted position would be the primary measure of the level of an institution's interest rate risk.

Table 3 shows the effect of a decline in rates. This decline is estimated to increase the present value of the example bank's assets by $8.87 million, lower the present value of its liabilities by $3.35 million, and reduce the value of its off-balance-sheet items by $181,000. The Net Risk-Weighted Position represents an increase of roughly $5.34 million in the net economic value of this institution. The differences in the magnitude of the change in value from that derived for the rising rate scenario is attributable to asymmetries in the price sensitivity of financial instruments as interest rates change (i.e., convexity) and different slotting of non-maturity deposits in the rising and falling rate scenarios.

The rate scenario that produces the larger loss or negative net position would be used in the assessment of capital for IRR. In the case of the example bank illustrated in Tables 2 and 3, the exposure to rising rates would be used to evaluate capital adequacy for IRR.

4. Reporting of Internal Model Results

The Banking Agencies request comment on a second Call Report schedule under consideration that could be used by banks that elect or that may be required to have their exposures evaluated on the basis of the results of their own internal models. This supplemental schedule would be recommended to the Federal Financial Institution Examination Council if the Banking Agencies relied on the information to provide an explicit capital charge for IRR.

The schedule (Schedule 2) consist of several asset, liability, and off-balance-sheet categories, with two scenarios for each category:

- Scenario 1 represents a specified increase in interest rates over the rates prevailing as of the report date. In each category under Scenario 1, the bank would report its estimate of the change in present value of the instruments if rates were to rise as specified in Scenario 1.

Proposed Internal Interest Rate Scenario Analysis Schedule: DRAFT

Schedule 2

To be filed by institutions that use an internal interest rate risk measurement system for compliance with guidelines.

Dollar Amounts in Thousands

	Rising Rates				Declining Rates			
		Bil	Mil	Thou		Bil	Mil	Thou
Interest Rate Risk Sensitivity Analysis - Estimated Change in Economic Value								
1. Securities								
a. Adjustable-rate mortgage securities	RCFD XXXX				RCFD XXXX			
b. Fixed-rate mtgs, asset-backed securities	RCFD XXXX				RCFD XXXX			
c. Zero or low coupon securities	RCFD XXXX				RCFD XXXX			
d. High-risk mortgage securities	RCFD XXXX				RCFD XXXX			
e. All other securities	RCFD XXXX				RCFD XXXX			
2. Loan and Leases								
a. Adjustable-rate mortgages	RCFD XXXX				RCFD XXXX			
b. Fixed-rate mtg, consumer loans	RCFD XXXX				RCFD XXXX			
c. All other loans (C&I, etc.)	RCFD XXXX				RCFD XXXX			
3. All Other Int-Bearing Assets (Bal. Due, Fed Funds)	RCFD XXXX				RCFD XXXX			
4. Total Liabilities:								
a. Non-maturity deposits (MMDAs, DDAs, NOWs, savings)	RCFD XXXX				RCFD XXXX			
b. Time deposits	RCFD XXXX				RCFD XXXX			
c. All other (include repos and sub. debt)	RCFD XXXX				RCFD XXXX			
5. Off-Balance-Sheet Contracts								
a. Swaps, futures, FRAs, etc.	RCFD XXXX				RCFD XXXX			
b. Options, caps, floors, etc.	RCFD XXXX				RCFD XXXX			
c. Mortgages & other amortizing instruments	RCFD XXXX				RCFD XXXX			
6. Trading Account								
a. Cash positions	RCFD XXXX				RCFD XXXX			
b. Off-balance-sheet positions	RCFD XXXX				RCFD XXXX			
7. Total Assets - Total Liabilities +/- Off-Balance-Sheet	RCFD XXXX				RCFD XXXX			

• Likewise, Scenario 2 represents a specified decrease in interest rates below the rates prevailing as of the report date. In each category under Scenario 2, the bank would report its estimates of the dollar change in present value of the respective instruments should rates fall as specified in Scenario 2.

The rate scenarios would be the same as those used for the supervisory model. The rate scenario that produces the higher loss or negative net position would be used in the assessment of capital for IRR. When used, internal models would be expected to reflect actual coupons and yields for the institution's positions, rather than those incorporated in the construction of the risk weights used in the supervisory model.

As currently drafted, this schedule would be a supplemental one and non-exempted banks would still be required to complete, in its entirety, the proposed schedule illustrated by Schedule 1, found in section 2 above. However, the Banking Agencies recognize that spreading trading account and off-balance-sheet positions across time bands may be especially burdensome for banks with larger portfolios and that, in many instances, the results of internal models may provide a more accurate assessment of the risk in these portfolios. Hence, the Banking Agencies request comment on the regulatory burden associated with reporting such positions by time bands.

C. Assessment of Capital Adequacy for IRR

Two alternative methods are proposed for assessing a bank's capital adequacy for IRR. Under one approach the Banking Agencies would establish minimum capital standards for IRR, relying on results of either the supervisory measure or the bank's internal model. Banks would be required to have capital sufficient to cover the amount of measured exposure in excess of the threshold level (e.g., the amount of their "excess" exposure). The second approach would not establish an explicit minimum capital requirement for IRR. Rather, examiners would consider results of quantitative measures of IRR exposure along with other factors in evaluating a bank's capital adequacy for IRR. Both of these alternatives are discussed in greater detail below.

Current supervisory policies require examiners to review IRR exposure and bank IRR management systems during the examination process. This review would continue under either approach to capital, but more specific procedures or examiner tools would exist. In addition to reviewing the risk measures described in this proposal, examiners would continue to consider the following managerial factors when evaluating safety and soundness:

• The adequacy of and compliance with the bank's written policies, procedures and internal controls;

• The existence of and adherence to specific risk limits relating to both loss of income and capital;

• Management's knowledge and ability to identify and manage sources of interest rate risk effectively; and

• The adequacy of internal risk measurement and monitoring systems.

1. Minimum Capital Standard Approach

Under this approach, institutions would be required to hold capital for IRR sufficient to cover their "excess exposure." Excess exposure is defined as the aggregate dollar decline in the net economic value of the institution, as measured by either the supervisory or the internal bank model, that exceeds the proposed supervisory threshold of 1 percent of assets.[13]

The dollar amount of capital required for IRR would be incorporated into the risk-based capital requirements by increasing the bank's risk-weighted assets. Because the amount of risk-weighted assets forms the denominator of the risk-based capital ratios, any increase to that denominator will lower a bank's measured ratio. Specifically, the dollar amount of the capital requirement for IRR would be multiplied by 12.5, which is the reciprocal of the 8 percent minimum risk-based capital ratio. This amount would be added to the total of the bank's risk-weighted assets for purposes of calculating the risk-based capital ratios. This approach does not reduce the amount of Tier 1 or total capital used to derive a bank's risk-based capital ratio, and therefore, avoids reducing the bank's leverage ratio or producing other unintended results.[14]

The following example illustrates how capital for IRR would be calculated and incorporated into a bank's risk-based capital ratio. In this example, a bank has $125 million in total assets, $100 million in risk-weighted assets, and $10 million in total capital. The bank's own model is used for measuring its IRR exposure and the model indicates, using the specified rate scenarios, a $2.25 million decline in net economic value for the rising rate scenario and a $3.0 million increase for the declining rate scenario. For this bank, the rising rate scenario is used to evaluate capital because it is this scenario which produces a decline in net economic value. The bank's excess exposure, and hence the amount of capital required for IRR, is $1 million ($2.25 million measured exposure less the threshold level of 1 percent of total assets or $1.25 million). This $1 million capital charge is then multiplied by 12.5 with the result ($12.5 million) added to the bank's risk-weighted assets. The new level of risk-weighted assets that would be used to calculate the bank's risk-based capital ratio would be $112.5 million. The resulting risk-based capital ratio would be 8.89 percent.

This approach would explicitly incorporate IRR into the existing risk-based capital framework. Banks would be required to have capital equal to at least 8 percent of the new risk-weighted assets. However, because most banks currently have risk-based capital ratios above the 8 percent minimum, this additional component of risk-weighted assets would not require most banks to raise additional capital. The additional component would, however, reduce a bank's calculated risk-based capital ratios and, in certain cases, could affect the bank's treatment under the provisions of prompt corrective action, as well as its deposit insurance premiums.

As with the approach taken in administering the current international risk-based capital standard, any amount of capital required for IRR by this risk measurement process would represent a minimum capital requirement. The exposure would be calculated each quarter using Call Report data, and banks would be expected to meet any capital requirement on a continuous basis. Banks using examiner-approved

[13] That is, when the measured exposure indicates a decline in net economic value that is greater than 1% of total assets, then:

Required Minimum Capital = Measured Exposure − (.01 Total Assets)

Otherwise, required minimum capital for IRR would be zero.

[14] An alternative technique being considered by the Banking Agencies would directly deduct the amount of excess measured exposure from Tier 1 or total capital. For an institution with an 8 percent risk-based capital ratio, the amount of capital required for IRR would be the same using either technique. However, this alternative capital calculation might have certain undesirable results. A deduction from Tier 1 would unintentionally complicate the calculation of an institution's leverage ratio and might require a different definition of Tier 1 capital for use in the leverage calculation. A deduction from total capital could, under certain conditions, leave an institution with Tier 1 risk-based capital ratio that is greater than its total capital ratio, even though total capital was intended to be the broader definition of capital. Moreover, in isolated cases, a deduction from capital for IRR could exceed the institution's regulatory capital, creating a negative capital, position. In Section D, the Banking Agencies seek comments on whether the proposed method or the alternative technique is more appropriate to use in calculating capital under the Minimum Capital Standard approach.

internal models to evaluate IRR for supervisory purposes would report the results of those models.

The adequacy of a bank's IRR management process and the precise characteristics of the bank's assets, liabilities and other positions would also be evaluated during on-site examinations. The on-site examination process would play a critical role in this approach by allowing examiners, during the examination, to consider specific factors relevant to that institution. A bank could be required to have higher amounts of capital for IRR is examiners found material deficiencies in its risk management policies, procedures, or controls or if its specific circumstances were substantially different from those assumed by the supervisory measure.[15]

2. Risk Assessment Approach

Under this approach, the level of measured interest rate exposure would be just one of several factors that examiners would consider when determining a bank's capital needs for interest rate risk. Other factors that would be considered include the quality of a bank's IRR management, internal controls, and the overall financial condition of the bank, including its earnings capacity, capital base, and the level of other risks which may impair future earnings or capital.

Examiners would evaluate a bank's capital adequacy as part of the on-site examination process and the Banking Agencies would provide examiners with guidance to determine the amount, which might be expressed as a range of capital, that may be needed for IRR in light of the above factors. These guidelines would provide examiners with criteria for assessing capital based on the adequacy of the bank's interest rate risk management process as well as the level of its interest rate risk exposure. In general, banks whose measured exposure exceeded the established threshold or whose risk management systems were judged to be deficient would be expected to hold additional capital commensurate with the risks being taken. However, any capital required for IRR would not be automatically incorporated into a bank's risk-based capital ratio.

This approach emphasizes the importance of risk factors that are not easily incorporated into quantitative measures and the role of examiner judgment. The on-site examination process would play a critical role in this approach by allowing examiners, during the examination, to consider specific factors relevant to that institution. Unique characteristics of each bank warrant evaluation on a case-by-case basis. However, uniformity in the examination process also is important and the guidelines mentioned above would be designed to ensure greater uniformity in this process.

To assess the level of interest rate risk exposure, examiners would initially use the supervisory model as a basis for discussions with bank management. All data, including trading account positions, would be drawn from Schedule 1 for use in this model. However, greater reliance would be placed on the results of a bank's own model if the examiner determined that the model provided a more accurate measure of the bank's risk. The examiner would evaluate the results of the internal model during on-site examinations, but banks would not be required to report this information in the Call Report. When an internal model is not available or is inadequate, examiners would rely on the results of the supervisory model.

In general, a bank would be viewed as having high levels of IRR if its measured exposure indicated a decline in the economic value of the institution that exceeded a threshold level of 1.0 percent of total assets. Banks that pass the reporting exemption test, or that otherwise have small measured interest rate risk exposures, would typically be considered to have low levels of risk. Other banks whose measured exposures were below threshold levels but were not minimal, or that held complex financial instruments with significant options-related risks that would result in significant risk measurement error, would generally be viewed as having moderate levels of interest rate risk.

At the completion of each examination, examiners would form and document conclusions as to the adequacy of a bank's capital and risk management process with regard to interest rate risk. An examiner's conclusions about both the level of risk and the adequacy of the risk management process would play an integral role in determining a bank's need for capital for IRR. Banks with high levels of measured exposure and weak management systems generally would need to hold capital for IRR, while those with low levels of exposures and adequate management systems might not be required to hold additional capital for IRR. The specific amount of capital that might be needed by a bank would be determined by the examiner using guidelines provided by the Banking Agencies. The examiner's findings would be discussed with bank management at the close of each examination.

During the intervals between examinations, the Banking Agencies would monitor bank IRR exposures through Call Report data and the supervisory model. Information about results of internal models would not be required in the Call Report. Significant changes in reported exposures or in a bank's overall financial condition would be analyzed by the supervisors to determine whether additional capital may be needed. This review of a bank's capital adequacy would also be required for any bank whose measured exposure exceeded the established threshold. The conclusions of this review would be documented by the supervisor and shared with bank management. However, bank management would be given the opportunity to respond to this review before any additional capital would be required.

D. Issues for Comment

1. Supervisory Measurement System

As proposed, the Banking Agencies would use the percent change in the net present value of a hypothetical instrument as the risk weight for balances represented by that instrument. Does use of the change in net present value sufficiently overcome the weakness of using the instrument's modified duration so as to provide a reasonable basis for risk weights?

2. Treatment of "Non-Maturity" Deposits

The Banking Agencies propose limits on the slotting of deposits without specified maturities (DDA, NOW, MMDA and savings) among time bands because of the problems inherent in measuring the price sensitivity of these deposits and the significant effect that different treatments for them can have on measuring a bank's IRR.

a. Do the proposed rules provide sufficient flexibility to reflect an institution's deposit behavior without undermining the risk measurement process?

b. Should institutions that have well-reasoned and documented internal assessments showing rate sensitivities that are outside of the proposed ranges be allowed to use those assessments? What specific types of analyses and supporting documentation should be required from banks that are allowed such an exception? Would most institutions have the capability of producing such types of analyses?

c. What is the appropriate basis for measuring changes in the price

[15] When internal models are used, by design, their results would always reflect the specific characteristics of the bank's on- and off-balance-sheet positions.

sensitivity or "market value" of these deposits?

The Banking Agencies also solicit comment and any relevant empirical evidence on the price sensitivity and market valuation of these deposits. Information relevant to assessing the changes in the market value of these deposits relative to changing interest rates would be most helpful.

3. Interest Rate Scenarios

In varying degrees, the proposed interest rate scenarios reflect the historical volatility of rates, the current level of rates, and the slope of the yield curve.

a. Should the sample period used to calculate the historical volatility of interest rates be based on a shorter period such as 5 years or a longer period such as 15 years?

b. Should the time interval used to measure volatility and to determine the corresponding rate scenarios be based on quarterly, semi-annual or annual interest rate volatilities?

c. Which is the preferred scenario to be used for both the supervisory and internal models?

d. Is it appropriate to use the same interest rate scenario for both the supervisory model and internal models?

e. Can banks' internal models incorporate the rate scenarios under consideration?

f. Should the Banking Agencies consider the effect of both rising and declining market interest rates? If both, should the risk weights be different to reflect the asymmetrical changes in the market values of certain instruments to the various rate changes, or should they be the same in the interest of simplicity?

g. Currently, the results under either proposed alternative indicate rate changes that are about 100 basis points using a quarterly time horizon and 200 basis points using annual volatilities. In the interest of simplicity, would the use of a parallel 100 or 200 basis point shift be preferred to the proposed nominal or proportional change methodology?

4. Use of Internal Models

The Banking Agencies propose to make greater use of a bank's own model, if the model is deemed adequate by examiners. The Banking Agencies seek comment on the following issues:

a. Is it appropriate to substitute the results of internal models for a standard supervisory calculation when assessing capital adequacy?

b. If internal models are used, to what extent should the Banking Agencies provide guidance to the industry on these models (e.g., acceptable methodologies or modeling parameters)? Would simply providing the interest rate scenario and requiring banks to evaluate the effect of the rate change on their net economic value suffice?

c. Which aspects of an internal model should examiners review to determine whether the model is adequate?

d. Should the assumptions required for the supervisory model also be imposed on internal models when these are used under Alternative One (Minimum Capital Standard approach)? To what degree should results of internal and supervisory measures be allowed to diverge because of different assumptions regarding non-maturity deposits, prepayments, or other factors? What competitive inequities might result if large differences are allowed?

e. Should some institutions be required to use more sophisticated internal models to calculate IRR exposure if an explicit capital charge for IRR is established? If so, what type or scope of activities should trigger such a requirement?

5. Use of OTS Model

The Office of Thrift Supervision (OTS) has adopted an alternative method for measuring the IRR exposures of savings associations which differs from that proposed by the Banking Agencies (see 57 FR 40524, September 3, 1992). Under the OTS method, savings associations report weighted average coupon and weighted maturity information for various classes of assets, liabilities and off-balance-sheet instruments. For certain instruments, mortgage-related instruments in particular, the amount of information reported is significantly more detailed than that proposed by the Banking Agencies.

The reported information is used in the OTS Market Value Model to estimate the change in a savings association's market value under various interest rate scenarios. The OTS model uses two valuation methodologies: (1) A static discounted cash flow analysis similar to that proposed by the Banking Agencies, and (2) an option-based pricing model (also known as an option-adjusted spread or OAS methodology) for valuing certain assets, such as mortgages and mortgage-related instruments, that contain embedded options.

The Banking Agencies request comment on the following issues:

a. Should commercial banks with portfolios that are similar to thrifts or those that are highly susceptible to IRR be required to use the OTS (or similar) model and reporting requirements to measure IRR in lieu of the proposed supervisory model?

b. If so, what criteria should the Banking Agencies use to determine which commercial banks should be subject to the OTS (or similar) model?

c. If a bank were required to use the OTS (or similar) model, should that bank still be allowed to report the results of an adequate internal model as proposed by the Banking Agencies? Alternatively, should the requirement to use the OTS (or similar) model rule out any reporting of the internal model?

d. For banks that may be required to use the OTS (or similar) model, does the OTS reporting format impose significant reporting burdens? What modifications could be made to reduce the burden if the Banking Agencies decide to use the basic approach of the OTS model?

6. Reporting Requirements

The Banking Agencies propose to recommend to the FFIEC a new reporting schedule to provide information better suited to determining the interest rate exposure of those institutions that do not meet the exemption criteria.

a. Does the reporting format currently under consideration, illustrated by Schedule 1, impose significant reporting burdens on non-exempted institutions? What modifications could be made to reduce the burden?

The Banking Agencies are also considering implementing a separate reporting schedule on which banks could report IRR exposures as measured by their own models.

b. If the Banking Agencies rely on a bank's internal model for assessing its IRR, should the bank be required to report the results of that model each quarter?

c. Should some or all of the information about the internal model be treated as confidential?

d. Is the information requested on Schedule 2 appropriate?

7. Threshold Level

The Banking Agencies propose to use a threshold level to determine whether a bank may be taking high levels of interest rate risk and, thus, need additional capital for IRR. As proposed, a bank would be viewed as having a high level of exposure if its measured exposure indicates a decline in the economic value of the institution that exceeds 1.0 percent of total assets.

a. Is this threshold appropriate?

b. The threshold level is based, in part, on the imprecision of the supervisory model. When more accurate internal systems are used, and especially if greater flexibility is permitted regarding the treatment of

non-maturity deposits, should a lower threshold also be used?

8. Exemption Test

The Banking Agencies have proposed a screening test that would exempt banks from any additional reporting requirements.

a. Are the exemption criteria reasonable?

b. Does the test adequately safeguard against exempting banks that pose significant risks to the deposit insurance fund due to IRR?

c. Since previously exempted banks may need to be prepared to report the data if they no longer meet the exemption criteria, does the exemption test significantly reduce record-keeping costs?

d. Is the reporting burden sufficiently onerous to warrant the reporting exemption?

9. Use of IRR Measure

The Banking Agencies are considering two approaches for using the proposed measurement system when evaluating capital adequacy. Under the Minimum Capital Standard approach, the measurement system would be the primary determinant in evaluating the need for capital for IRR. The Risk Assessment approach would use the measurement system as just one factor in determining the need for additional capital.

a. Comments are requested on the merits of each of these approaches.

b. Under the Minimum Capital Standard approach, the Banking Agencies are proposing that the capital requirement for IRR be implemented by increasing a bank's risk-weighted assets by an amount equal to 12.5 times the excess measured exposure, where 12.5 represents the reciprocal of the 8 percent minimum risk-based capital ratio. An alternative technique would be to directly deduct the amount of excess measured exposure from Tier 1 or total capital. The Banking Agencies seek comments on whether the proposed method or the alternative technique is more appropriate to use in calculating capital under the Minimum Capital Standard approach.

10. Capital Assessment

In determining a bank's capital needs for IRR, the Banking Agencies seek comment on the following issues:

a. To what extent should examiners have flexibility when evaluating an institution's measured IRR exposure for capital purposes?

b. What consideration should be given to the quality of a bank's risk management process when evaluating the bank's IRR? How should this consideration be incorporated into an assessment of capital adequacy?

11. Reporting for Multi-bank Holding Companies

The proposal states that data will be collected and risk measured for individual banks.

a. In addition to reviewing individual bank positions, to what extent should the Banking Agencies also consider consolidated positions of the parent holding company or, alternatively, the aggregate position of only its affiliated banks?

b. What is the extent of the reporting burden associated with reporting individual bank positions?

12. Leverage Standard

When announcing regulations to implement section 38 of FDICIA in September, 1992, the federal banking agencies stated that they intend to lower or eliminate the leverage capital component from the risk-based capital standard after that standard has been revised to take into account interest rate risk and after experience has been gained with the (modified) standard. Does either the Minimum Capital Standard approach or the Risk Assessment approach provide an adequate basis for reconsidering the need for the leverage standard? Would the basis for removing that standard be stronger under one approach than the other?

Regulatory Flexibility Act Statement

Each agency has concluded after reviewing the proposed regulations that the regulations, if adopted, will not impose a significant economic hardship on small institutions. The proposal does not necessitate the development of sophisticated recordkeeping or reporting systems by small institutions nor will small institutions need to seek out the expertise of specialized accountants, lawyers, or managers in order to comply with the regulation. Each agency therefore hereby certifies pursuant to section 605b of the Regulatory Flexibility Act (5 U.S.C. 605b) that the proposal, if adopted, will not have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.).

Executive Order 12291

The Comptroller of the Currency has preliminarily determined that proposed regulation may be a "major rule" within the meaning of Executive Order 12291. Accordingly, the OCC has prepared a Preliminary Regulatory Impact Analysis.

The objectives of the proposed regulation are to ensure that banks: (1) Hold capital consistent with the level of IRR in their portfolios so as to reduce the incidence of bank failures and claims upon the Bank Insurance Fund (BIF); (2) effectively measure and monitor their IRR exposures; and (3) consider both interest rate and credit risks in making investment and lending decisions. This proposed rule implements section 305(b)(1)(A)(i) of FDICIA and is consistent with those requirements.

A number of benefits can be expected to accrue from the proposed regulation. These include: (1) Either an increase in bank capital or a reduction in IRR for those banks with high levels of IRR; (2) a reduction in the incentive for banks to substitute IRR for credit risk; and (3) an increase in the awareness among banks of the need to measure and manage IRR. A number of costs can be expected to accrue from the proposed regulation. These include: (1) Direct compliance costs; (2) supervisory costs; and (3) costs associated with the impact of the rule on bank behavior.

The Regulatory Impact Analysis is based on preliminary and limited data that make it difficult to estimate the impact of this rule. This difficulty arises from the lack of sufficient data to accurately estimate which banks may be found to have high IRR exposures under the proposal, the amount of capital those banks may need, and the complexities of trying to estimate how banks may change their behavior in response to the proposed rule.

The OCC seeks to issue a final rule that will meet its objectives at the least possible net cost to the economy. The OCC invites commenters to provide any data they may have on the costs and benefits of this proposal with regard to the management of IRR at banking organizations, the impact on bank capital levels and on the pricing, selection and offering of products and investments by banks, and on direct costs that banks may incur as the result of the proposed rule.

Copies of the Preliminary Regulatory Impact Analysis may be obtained by writing to the following address: IRR Impact Statement, Mail Stop 9–16, Communications Division, Office of the Comptroller of the Currency, 250 E Street SW., Washington, DC 20219.

List of Subjects

12 CFR Part 3

Administrative practice and procedure, Capital risk, National banks, Reporting and recordkeeping requirements.

12 CFR Part 208

Accounting, Agriculture, Banks, Banking, Confidential business information, Currency, Reporting and recordkeeping requirements, Securities.

12 CFR Part 325

Bank deposit insurance, Banks, Banking, Capital adequacy, Reporting and recordkeeping requirements, Savings associations, State nonmember banks.

COMTROLLER OF THE CURRENCY

Authority and Issuance

For the reasons set out in the joint preamble, part 3 of chapter I of title 12 of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 3—MINIMUM CAPITAL RATIOS; ISSUANCE OF DIRECTIVES

1. The authority citation for part 3 continues to reads as follows:

Authority: 12 U.S.C. 93a, 161, 1818, 1828(n), 1828 note, 1831n note, 3907 and 3909.

Alternative One (Minimum Capital Standard Approach) for Appendix A and B to Part 3—Risk-Based Capital Guidelines

2. In appendix A, section 4 is amended by revising paragraph (b)(1), redesignating paragraphs (b)(2) and (b)(3) as paragraphs (b)(3) and (b)(4), respectively, and by adding a new paragraph (b)(2) to read as follows:

Section 4. Implementation, Transition Rules, and Target Ratios

* * * * *

(b)(1) Each national bank must maintain a minimum ratio of total capital (after deductions) to risk-weighted assets (adjusted for interest rate risk) of 8.0%.

(b)(2) If a bank is required to maintain additional capital for interest rate risk exposure, as determined in accordance with appendix B to part 3, risk-weighted assets must be increased by an amount equal to 12.5 times the dollar amount of the additional capital requirement for interest rate risk, before determining the minimum ratio of total capital to risk-weighted assets specified in section 4(b)(1) of this appendix A.

* * * * *

3. A new appendix B is added to part 3 after appendix A to read as follows:

Appendix B—Interest Rate Risk Component

Section 1. Purpose, Definitions, and Applicability of Guidelines

(a) *Purpose.* This appendix B explains precisely how the interest rate risk exposure of a bank is to be measured for the purpose of determining compliance with the capital adequacy requirements.

(b) *Definitions.* For the purpose of this appendix B, the following definitions apply:

(1) *Excess measured exposure* means the dollar amount of measured exposure to interest rate risk in excess of the supervisory threshold. This amount represents the amount of interest rate risk against which the bank must maintain capital.

(2) *Interest rate scenarios* means the specified changes in market interest rates used in calculating a bank's measured exposure.

(3) *Measured exposure* means the estimated dollar decline in the net economic value of the bank in response to a potential change in market interest rates under the specified interest rate scenarios, as determined pursuant to either the supervisory measure or the bank's internal measure. When the supervisory measure is used to calculate the bank's measured exposure, pursuant to section 4 of this appendix B, a bank's measured exposure is derived by calculating the bank's net risk-weighted position.

(4) *Mortgage derivative products* means interest-only and principal-only stripped mortgage-backed securities (IOs and POs), tranches of collateralized mortgage obligations (CMOs) and real estate mortgage investment conduits (REMICs), CMO and REMIC residual securities, and other instruments having the same characteristics as these securities.

(5) *Net economic value of the bank* means the net present value of its assets minus the net present value of its liabilities plus the net present value of its off-balance-sheet instruments.

(6) *Net risk-weighted position* means the sum of all risk-weighted positions of a bank's assets, liabilities and off-balance sheet items. For the purposes of the supervisory measure, this number represents the amount by which the net economic value of the bank is estimated to change in response to a potential change in market interest rates under the specified interest rate scenarios.

(7) *Nonmaturity deposits* mean demand deposit accounts (DDAs), money market deposit accounts (MMDAs), savings accounts, and negotiable order of withdrawal accounts (NOWs).

(8) *Notional principal amount* means the total dollar amount upon which a contract is based.

(9) *Supervisory threshold* means 1% of a bank's total assets.

(c) *Applicability and exemption for institutions with low risk.* (1) All national banks are subject to the requirements of this appendix B and must calculate their excess measured exposure as required by the supervisory model or by an internal measure, pursuant to sections 4 or 9 of this appendix B, unless:

(i) The total notional principal amount of the bank's off-balance sheet interest rate contracts is less than 10% of total assets, and

(ii) 15% of the sum of fixed- and floating-rate loans and securities that mature or reprice beyond 5 years is less than 30% of total capital.

(2) Notwithstanding paragraph (c)(1) of this section, the OCC may require a bank to meet the requirements of this appendix B if compliance is necessary to ensure the capital adequacy of the bank.

Section 2. Capital Requirement for Interest Rate Risk

A bank shall maintain capital for interest rate risk in an amount equal to the bank's excess measured exposure. The amount of capital required for interest rate risk is in addition to the amount of capital required by appendix A of this part 3. Compliance shall be determined as specified in section 4(b)(2) of Appendix A.

Section 3. Specified Interest Rate Scenarios

For the purpose of calculating a bank's measured exposure, under either the supervisory measure or an internal measure, the bank shall use both a rising and falling interest rate scenario based on an instantaneous uniform 200 basis point parallel change in market interest rates at all maturities. The interest rate scenarios, with the accompanying risk weights, are provided in Table 1 of section 7 of this appendix B. The OCC may modify the specified interest rate scenarios as appropriate considering historical and current interest rate levels, interest rate volatilities and other relevant market and supervisory considerations.

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

Interest Rate Risk Worksheet (200 Basis Point Declining Rate Scenario)

DRAFT

Table 3

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	0.10%	$6	
(b) 3 to 12 months	$4,950	0.60%	$30	
(c) 1 to 3 years	$4,050	1.70%	$69	
(d) 3 to 5 years	$4,166	3.10%	$129	
(e) 5 to 10 years	$6,620	3.40%	$225	
(f) 10 to 20 years	$6,454	5.90%	$381	
(g) Greater than 20 years	$10,430	3.60%	$375	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	0.25%	$3	
(b) 3 to 12 months	$1,000	1.20%	$12	
(c) 1 to 3 years	$1,000	3.90%	$39	
(d) 3 to 5 years	$0	8.00%	$0	
(e) 5 to 10 years	$0	15.60%	$0	
(f) 10 to 20 years	$0	33.50%	$0	
(g) Greater than 20 years	$0	61.90%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	0.25%	$67	
(b) 3 to 12 months	$28,432	1.20%	$341	
(c) 1 to 3 years	$31,136	3.70%	$1,152	
(d) 3 to 5 years	$19,728	7.00%	$1,381	
(e) 5 to 10 years	$10,564	11.70%	$1,236	
(f) 10 to 20 years	$8,837	19.00%	$1,679	
(g) Greater than 20 years	$9,462	24.60%	$2,328	
4. High-risk mortgage securities				
(a) Self-reporting	$2,000		($200)	
(b) Risk weighting	$1,000	-38.00%	($380)	
5. Total Interest-Sensitive Assets	$183,000		$8,871	$8,871
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$186,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$38,583	-0.25%	($96)	
(b) 3 to 12 months	$77,582	-1.20%	($931)	
(c) 1 to 3 years	$39,821	-3.90%	($1,553)	
(d) 3 to 5 years	$10,090	-7.50%	($757)	
(e) 5 to 10 years	$64	-13.50%	($9)	
(f) 10 to 20 years	$0	-24.50%	$0	
(g) Greater than 20 years	$0	-36.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		($3,346)	
V. NONINTEREST-SENSITIVE LIABILITIES	$860			
VI. TOTAL LIABILITIES	$167,000		($3,346)	($3,346)
VII. EQUITY CAPITAL	$19,001			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	0.25%	$10	
(b) 3 to 12 months	$500	1.20%	$6	
(c) 1 to 3 years	($4,050)	3.70%	($150)	
(d) 3 to 5 years	($450)	7.00%	($32)	
(e) 5 to 10 years	$0	11.70%	$0	
(f) 10 to 20 years	$0	19.00%	$0	
(g) Greater than 20 years	$0	24.60%	$0	
2. Mortgage and other amortizing contracts				
(a) Up to 3 months	$1,000	0.10%	$1	
(b) 3 to 12 months	$0	0.60%	$0	
(c) 1 to 3 years	($1,000)	1.70%	($17)	
(d) 3 to 5 years	$0	3.10%	$0	
(e) 5 to 10 years	$0	3.40%	$0	
(f) 10 to 20 years	$0	5.90%	$0	
(g) Greater than 20 years	$0	3.60%	$0	
3. Total Off-Balance-Sheet Positions	$0		($181)	($181)
Net Risk Weighted Position				$5,344.31
Net Position/ Assets				2.87%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

Section 4. Supervisory Measure

(a) *Use of supervisory measure.* Except as provided by section 9 of this appendix B, a bank's measured exposure to interest rate risk must be calculated pursuant to the supervisory measure as specified by sections 5 through 8 of this appendix B.

(b) *Overview of interest rate risk calculation.* The calculation of a bank's measured exposure generally requires the following steps:[1]

(1) The bank's assets, liabilities, and off-balance sheet contracts must be assigned to the appropriate balance sheet categories based on the instrument's cash flow characteristics.

(2) Within each balance sheet category, each asset, liability or off-balance sheet contract must be assigned to the appropriate time bank generally based on each instrument's remaining maturity or next repricing date.

(3) Balances within each time band are multiplied by the appropriate risk weight to produce a risk-weighted position for each interest rate scenario.

(4) All risk-weighted positions are summed to produce a net risk-weighted position for each interest rate scenario which is the basis for determining the bank's measured exposure to interest rate risk.

Section 5. Balance Sheet Categories

All assets, liabilities, and off-balance sheet positions must be assigned to one of the following interest rate risk balance-sheet categories, as appropriate:

(a) *Adjustable-rate assets.* Adjustable-rate mortgage loans and adjustable-rate mortgage securities.

(b) *Amortizing fixed-rate loans and securities.* Fixed-rate mortgage securities, and asset-backed securities, fixed-rate mortgage loans, consumer loans and other instruments that involve scheduled periodic amortization of principal, except for mortgage derivative products.

(c) *High-risk mortgage securities.* Any mortgage derivative product that at the time of purchase or at any subsequent date:

(1) Has an expected weighted average life greater than 10 years; or

(2) Has an expected weighted average life that:

(i) Extends by more than 4 years, assuming an immediate and sustained parallel shift in the yield curve of plus 300 basis points; or

(ii) Shortens by more than 6 years, assuming an immediate and sustained parallel shift in the yield curve of minus 300 basis points; or

(3) Has a change in price of greater than 17%, assuming an immediate and sustained parallel shift in the yield curve of plus or minus 300 basis points.

(d) *Zero- or low-coupon assets.* Securities with either no periodic interest payments or stated coupons of 2% or lower.

(e) *Trading account items.* Trading account assets and related off-balance sheet instruments.

(f) *All other assets.* All other interest-sensitive instruments, which are assumed to involve scheduled periodic payments of interest and the payment of principal at maturity and all mortgage derivative products that are not high-risk mortgage securities.

(g) *Liabilities.* All deposits and all nondeposit liabilities whose values are sensitive to movements in interest rates.

(h) *Off-balance sheet items.* Interest-rate contracts including swaps, forwards, options, and futures and mortgage-related fixed-rate commitments and other off-balance sheet derivative instruments whose value depends on the value of an underlying asset or index with amortizing characteristics

Section 6. Time Bands

(a) *Assignment of item balances.* The balance of each asset, liability, and off-balance sheet item within each balance sheet category, as specified in section 5 of this appendix B, must be assigned to one of the following time bands according to the remaining maturity of next repricing date of the asset, liability, or off-balance sheet item:

(1) Less than or equal to 3 months;

(2) Greater than 3 months and less than or equal to 12 months;

(3) Greater than 1 year and less than or equal to 3 years;

(4) Greater than 3 years and less than or equal to 5 years;

(5) Greater than 5 years and less than or equal to 10 years;

(6) Greater than 10 years and less than or equal to 20 years;

(7) Greater than 20 years.

(b) *Remaining maturity and repricing date.* (1) *General.* Except for certain mortgage derivative products and nonmaturity deposits, and the remaining maturity of an asset, liability, or off-balance sheet item generally is determined by the remaining time before maturity, or the next actual or potential repricing date, associated with the outstanding principal or notional principal amount as specified by contract or agreement.

(2) *Remaining maturity and repricing date for mortgage derivative products.* (i) For mortgage derivative products, other than for high-risk mortgage securities, the current expected average life must be used instead of the remaining time before maturity or the next actual or potential repricing date. For high-risk mortgage securities, a bank's own estimate of the change in market value under the specified interest rate scenario is to be used. However, if this information is not available from the bank, the OCC will determine the appropriate treatment for maturity and repricing.

(ii) The current expected average life of a mortgage derivative product is to be determined by the management of the bank. All underlying assumptions, such as prepayment assumptions, used in determining the current expected average life of these instruments must be reasonable and will be subject to OCC review.

(3) *Remaining maturity and repricing date for nonmaturity deposits.* Notwithstanding paragraph (b)(1) of this section, the remaining maturity and repricing date for nonmaturity deposits is determined by the management of the bank based on its own assumptions and experience, subject to the following conditions:

(i) The remaining maturity and repricing date for DDAs and MMDAs may not exceed 3 years, with a maximum of 40% of these balances in the "greater than 1 year but less than or equal to 3 years" time band;

(ii) The remaining maturity and repricing date for savings and NOW account balances may not exceed 5 years, with a maximum of 40% of the total of these balances in the "greater than 3 years but less than or equal to 5 years" time band; and

(iii) All assumptions used by the bank in determining the remaining maturity and repricing date for nonmaturity deposits must be reasonable and are subject to review by the OCC.

Section 7. Risk Weights

The risk weights estimate the sensitivity of the present value of each asset, liability, and off-balance sheet item within each balance sheet category and time band under a rising and falling interest rate scenario. These risk weights are provided in Table 1. The risk-weighted positions for all assets, liabilities, and off-balance sheet items must be calculated by multiplying all assets, liabilities, and off-balance sheet items as specified according to balance sheet category and time band, by the corresponding risk weight as illustrated in Table 2 (rising interest rate scenario) and Table 3 (falling interest rate scenario).

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

[1] The calculations for the rising and falling interest rate scenarios are illustrated in Table 2 and Table 3, respectively.

Risk Weights

Table 1

Amortizing Instruments

Timeband	Scenario 1 200 Basis Point Rise % Change in Present Value (Risk Weights)	Scenario 2 200 Basis Point Decline % Change in Present Value (Risk Weights)
0-3 months	-0.10%	0.10%
3-12 months	-0.50%	0.60%
1-3 Years	-1.60%	1.70%
3-5 Years	-3.00%	3.10%
5-10 Years	-5.30%	3.40%
10-20 Years	-8.80%	5.90%
Over 20 Years	-9.20%	3.60%

All Other Instruments

0-3 months	-0.25%	0.25%
3-12 months	-1.20%	1.20%
1-3 Years	-3.50%	3.70%
3-5 Years	-6.40%	7.00%
5-10 Years	-10.20%	11.70%
10-20 Years	-14.90%	19.00%
Over 20 Years	-17.60%	24.60%

Liabilities

0-3 months	0.25%	-0.25%
3-12 months	1.20%	-1.20%
1-3 Years	3.70%	-3.90%
3-5 Years	6.90%	-7.50%
5-10 Years	11.60%	-13.50%
10-20 Years	18.70%	-24.50%
Over 20 Years	24.00%	-36.00%

Zero or Low Coupon Securities

0-3 months	-0.25%	0.25%
3-12 months	-1.20%	1.20%
1-3 Years	-3.70%	3.90%
3-5 Years	-7.40%	8.00%
5-10 Years	-13.30%	15.60%
10-20 Years	-24.90%	33.50%
Over 20 Years	-38.00%	61.90%

Interest Rate Risk Worksheet (200 Basis Point Rising Rate Scenario)

DRAFT

Table 2

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	-0.10%	($6)	
(b) 3 to 12 months	$4,950	-0.50%	($25)	
(c) 1 to 3 years	$4,050	-1.60%	($65)	
(d) 3 to 5 years	$4,166	-3.00%	($125)	
(e) 5 to 10 years	$6,820	-5.30%	($361)	
(f) 10 to 20 years	$6,454	-8.80%	($568)	
(g) Greater than 20 years	$10,430	-9.20%	($960)	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	-0.25%	($3)	
(b) 3 to 12 months	$1,000	-1.20%	($12)	
(c) 1 to 3 years	$1,000	-3.70%	($37)	
(d) 3 to 5 years	$0	-7.40%	$0	
(e) 5 to 10 years	$0	-13.30%	$0	
(f) 10 to 20 years	$0	-24.90%	$0	
(g) Greater than 20 years	$0	-38.00%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	-0.25%	($67)	
(b) 3 to 12 months	$28,432	-1.20%	($341)	
(c) 1 to 3 years	$31,136	-3.50%	($1,090)	
(d) 3 to 5 years	$19,778	-6.40%	($1,263)	
(e) 5 to 10 years	$10,564	-10.20%	($1,078)	
(f) 10 to 20 years	$8,807	-14.90%	($1,317)	
(g) Greater than 20 years	$9,462	-17.60%	($1,665)	
4. High-risk mortgage securities				
(a) Self-reporting	$2,000		$160	
(b) Risk weighting	$1,000	-38.00%	($380)	
5. Total Interest-Sensitive Assets	$193,000		($9,190)	($9,190)
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$196,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$23,081	0.25%	$58	
(b) 3 to 12 months	$74,582	1.20%	$895	
(c) 1 to 3 years	$11,293	3.70%	$1,000	
(d) 3 to 5 years	$17,090	6.90%	$1,179	
(e) 5 to 10 years	$64	11.60%	$7	
(f) 10 to 20 years	$0	18.70%	$0	
(g) Greater than 20 years	$0	24.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		$4,038	
IV. NONINTEREST-SENSITIVE LIABILITIES	$860			
VI. TOTAL LIABILITIES	$167,000		$4,038	$4,038
VII. EQUITY CAPITAL	$19,001			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	-0.25%	($10)	
(b) 3 to 12 months	$500	-1.20%	($6)	
(c) 1 to 3 years	($4,050)	-3.50%	$142	
(d) 3 to 5 years	($450)	-6.40%	$29	
(e) 5 to 10 years	$0	-10.20%	$0	
(f) 10 to 20 years	$0	-14.90%	$0	
(g) Greater than 20 years	$0	-17.60%	$0	
2. Mortgage and other amortizing contracts				
(a) Up to 3 months	$1,000	-0.10%	($1)	
(b) 3 to 12 months	$0	-0.50%	$0	
(c) 1 to 3 years	($1,000)	-1.60%	$16	
(d) 3 to 5 years	$0	-3.00%	$0	
(e) 5 to 10 years	$0	-5.30%	$0	
(f) 10 to 20 years	$0	-8.80%	$0	
(g) Greater than 20 years	$0	-9.20%	$0	
3. Total Off-Balance-Sheet Positions	$0		$170	$170
Net Risk Weighted Position				($4,981.80)
Net Position/ Assets				-2.68%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

Section 8. Calculation of Excess Measured Exposure

(a) *Calculation of net risk-weighted position.* The net risk-weighted position must be calculated for both the rising interest rate scenario and the falling interest rate scenario. The net risk-weighted position for the rising interest rate scenario is calculated by summing the risk-weighted positions for all assets, liabilities, and off-balance sheet items, as derived in Table 2 of this appendix B. The net risk-weighted position for the falling interest rate scenario is calculated by summing the risk-weighted positions for all assets, liabilities, and off-balance sheet items, as derived in Table 3 of this appendix B. In mathematical terms the calculation for the net risk-weighted position is (Assets × Risk Weights) + (Liabilities × Risk Weights) + (Off-Balance-Sheet Positions × Risk Weight) = Net Risk-Weighted Position.9

(b) *Calculation of measured exposure to interest rates.* The bank's net risk-weighted positions under the rising interest rate scenario and the falling interest rate scenario represent the bank's measured exposures to interest rate risk. If the bank's net risk-weighed position is positive under both of the interest rate scenarios, then the bank's measured exposure is set to zero. If the bank's net risk-weighted position is negative under one or both of the interest rate scenarios, then the bank's measured exposure is equal to the larger decline in the net economic value of the bank under the two interest rate scenarios.

(c) *Calculation of excess measured exposure.* The bank's excess measured exposure is the positive difference of the absolute dollar amount of the measured exposure minus the dollar amount of the supervisory threshold. In mathematical terms the calculation for a bank's excess measured exposure is Measured Exposure—(Total Assets × .01). If the amount of the supervisory threshold is greater than the measured exposure, then the excess measured exposure is zero.

Section 9. Internal Measure

The OCC may permit or require a bank to use an internal measure developed or acquired by the bank to determine its measured exposure instead of the supervisory measure where the OCC deems that such internal measure is acceptable.

(a) *Acceptable internal measure.* Factors that the OCC will consider in determining whether to permit a bank to use an internal measure include:

(1) Whether the assumptions and structure of the supervisory measure accurately reflect the bank's assets, liabilities, and off-balance sheet positions, and whether the internal measure provides a more precise measurement of the changes in the net economic value of the bank than the supervisory measure;

(2) Whether the internal measure makes use of generally accepted techniques in estimating measured exposure;

(3) Whether the internal measure is appropriate to the nature and scope of the activities of the bank; and

(4) Whether the internal measure provides an adequate indication of the exposure of the institution to interest rate risk in all material respects.

(b) *Required use of internal measure.* The OCC may require a bank for the purposes of compliance with the requirements of this appendix B to use an existing internal measure where the OCC determines that:

(1) The supervisory measure does not adequately characterize the interest rate risk of the bank's positions; and

(2) The use of the supervisory measure would materially misrepresent the bank's actual interest rate risk exposure.

(c) *Interest Rate Scenario.* Where a bank is either permitted or required to use an internal measure, the internal measure must incorporate the same interest rate scenarios used by the supervisory measure as specified in section 3 in this appendix B.

Section 10. Implementation

The requirements of this appendix B are applicable to all national banks after December 31, 1994.

ALTERNATIVE TWO (RISK ASSESSMENT APPROACH) FOR PART 3—RISK-BASED CAPITAL GUIDELINES

4. In § 3.10, paragraph (d) is amended by removing the phrase "interest rate risk,"; paragraphs (e), (f), (g), (h), and (i) are redesignated as paragraphs as (f), (g), (h), (i), and (j), respectively; and new paragraph (e) is added to read as follows:

§ 3.10 Applicability.

* * * * *

(e) A bank with significant interest rate risk exposure;

* * * * *

This signature page relates to the Joint Notice of Proposed Rulemaking titled Risk-Based Capital Standards: Interest Rate Risk, Office of the Comptroller of the Currency, Department of the Treasury, Docket Number 93–11.

Office of the Comptroller of the Currency.

Dated: September 2, 1993.

Eugene A. Ludwig,

Comptroller of the Currency.

FEDERAL RESERVE SYSTEM

Authority and Issuance

For the reasons set out in the joint preamble, part 208 of chapter II of title 12 of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 208—MEMBERSHIP OF STATE BANKING INSTITUTIONS IN THE FEDERAL RESERVE SYSTEM

1. The authority citation for part 208 continues to read as follows:

Authority: 12 U.S.C. 36, 248(a), 248(c), 321–338, 461, 481–486, 601, 611, 1814, 1823(j), 3105, 3310, 3331–3351, and 3906–3909; 15 U.S.C. 78b, 781(b), 781(g), 781(i), 78o–4(c)(5), 78q, 78q–1, and 78w.

ALTERNATIVE ONE (MINIMUM CAPITAL STANDARD APPROACH) FOR APPENDIX A TO PART 208—CAPITAL ADEQUACY GUIDELINES FOR STATE MEMBER BANKS: RISK-BASED MEASURE

2. Section III of appendix A to part 208 is amended by revising the first undesignated paragraph of paragraph A, and by adding new paragraph F. to read as follows:

Appendix A to Part 208—Capital Adequacy Guidelines for State Member Banks: Risk-Based Measure

* * * * *

III. * * *

A. * * *

Assets and credit-equivalent amounts of off-balance-sheet items of state member banks are assigned to one of several broad risk categories, according to the obligor, or, if relevant, the guarantor or the nature of the collateral. The aggregate dollar value of the amount in each category is then multiplied by the risk weight associated with that category. In addition, a credit equivalent amount of each bank's excess measured exposure to interest rate risk is calculated. The weighted values from each of the risk categories and the credit equivalent amount for interest rate risk are added together, and this sum is the bank's total weighted-risk assets that comprise the denominator of the risk-based capital ratio. Attachment I provides a sample calculation.

* * * * *

F. Interest Rate Risk

Credit equivalent amounts for interest rate risk are calculated by multiplying a bank's excess measured exposure to interest rate risk by 12.5.

1. Definitions

(i) *Excess measured exposure* means the dollar amount of measured exposure to interest rate risk in excess of the supervisory threshold.

(ii) *Measured exposure* means the estimated dollar decline in the net economic value of the bank under the specified interest rate scenario, as determined pursuant to either a supervisory measure or, where the Board deems appropriate, the bank's internal measure of interest rate exposure. When the supervisory measure is used to calculate the bank's measured exposure pursuant to paragraph (2)(i), a bank's measured exposure is derived by calculating the bank's net risk-weighted position, as described in part I.A. of attachment VIII.

(iii) *Net economic value of a bank* means the net present value of its assets minus the net present value of its liabilities plus the net present value of its off-balance-sheet instruments.

(iv) *Net risk-weighted position* means the sum of all risk-weighted positions of a bank's assets, liabilities and off-balance-sheet items. For purposes of the supervisory measure, this number represents the amount by which the net economic value of the bank is estimated

to change in response to a potential change in market interest rates under the specified interest rate scenarios.

(v) *Supervisory threshold* means the equivalent of 1 percent of the bank's total assets.

2. Exemption for Banks With Low Risk

(i) *In general.* Except as provided in paragraph 2.(i), a state member bank's excess measured exposure shall be calculated pursuant to this section unless:

a. The total notional principal amount of the bank's off-balance-sheet interest rate contracts is less than 10% of total assets; and

b. 15 percent of the sum of fixed- and floating-rate loans and securities that mature or reprice beyond 5 years is less than 30 percent of total capital;

(ii) *Discretion of the Board.* The Board may require the calculation of a bank's excess measured exposure if the Board determines that such calculation is necessary to assess the capital adequacy of the bank.

3. Measured Exposure

(i) *Supervisory measure.* Except as provided in paragraph 3.(ii), a bank's measured exposure to interest rate risk shall be calculated pursuant to the supervisory measure set forth in attachment VIII to this appendix.

(ii) *Use of Internal Measure.* During each examination, or at the request of a bank, the Board will examine any internal measure of interest rate risk. If the bank's internal measure is acceptable to the Board in its sole discretion, then the bank's measure may be used in place of the supervisory model in determining the bank's excess measured exposure.

(iii) *Acceptable internal measure.* In determining whether a bank's internal measure of exposure to interest rate risk is acceptable, the Board will consider:

a. Whether the assumptions and structure of the supervisory measure accurately reflect the bank's assets, liabilities, and off-balance-sheet positions, and whether the internal measure provides a more precise measurement of the change in economic value of the bank;

b. Whether the internal measure makes use of generally accepted techniques in estimating measured exposure;

c. Whether the internal measure is appropriate to the nature and scope of the bank's activities; and

d. Whether the internal measure provides an adequate indication of the exposure of the bank to interest rate risk in all material respects.

(iv) *Requirement to use internal measure.* The Board may require that a bank use its existing internal measure for the purposes of this section if the Board determines that the internal measure represents the bank's positions more accurately than the supervisory model.

(v) *Interest rate scenario.* Measured exposure will be estimated for a specified change in the level of market interest rates, as provided in attachment VIII. This change will be a uniform increase of 2 percentage points (200 basis points) in market interest rates at all maturities.

3. Attachment I to Appendix A to part 208 is revised as follows:

Attachment I—Sample Calculation of Risk-Based Capital Ratio for State Member Banks

Example of a bank with $6,000 in total capital and the following assets and off-balance-sheet items.

Balance sheet assets:	
Cash	$5,000
U.S. Treasuries	20,000
Balances at domestic banks	5,000
Loans secured by first liens on 1- to 4- family residential properties	5,000
Loans to private corporations	65,000
Total Balance-Sheet Assets	100,000
Off-balance-sheet items:	
Standby letters of credit (SLCs) backing general-obligation debt issues of U.S. municipalities (GOs)	10,000
Long-term legally binding commitments to private corporations	20,000
Total Off-Balance-Sheet Items	30,000
Interest Rate Risk (IRR):	
Excess measured exposure to IRR	2,000

This bank's total capital to total assets (leverage) ratio would be: ($6.000/$100,000)=6.00%

To compute the bank's risk-weighted assets—

1. Compute the credit-equivalent amount of each off-balance-sheet (OBS) item.

Credit OBS

Item	Face value		Conversion factor		Equivalent amount
SLCs backing municipal GOs	$10,000	*	1.00	=	$10,000
Long-term commitments to private corporations	$20,000	*	0.50	=	$10,000

2. Compute the credit-equivalent amount of excess measured exposure to IRR.

Credit

Excess measured exposure		Conversion factor		Equivalent amount
$2,000	*	12.5	=	$25,000

3. Multiply each balance-sheet asset and the credit equivalent amount of each OBS item and excess measured exposure to IRR by the appropriate risk weight.

Credit

Item	Face value		Conversion factor		Equivalent amount
0% category:					
Cash	$5,000				
U.S. Treasuries	20,000				
	25,000	*	0	=	0
20% category:					
Balances at domestic banks	5,000				
Credit-equivalent amounts of SLCs backing GOs of U.S. municipalities	10,000				
	15,000	*	0.20	=	3,000
50% category:					
Loans secured by first liens on 1- to 4-family residential properties	5,000	*	0.50	=	2,500

Item	Face value		Credit Conversion factor		Equivalent amount
100% category:					
Loans to private corporations	65,000				
Credit-equivalent amounts of long-term commitments to private corporations	10,000				
Credit-equivalent amount of excess measured exposure to IRR	25,000				
	100,000	*	1.00	=	100,000
Total Risk-Weighted Assets					105,500

This bank's ratio of total capital to weighted-risk assets (risk-based capital ratio) would be: (6,000/$105,500)=5.69%.

Alternative Two (Risk Assessment Approach) for Appendix A to Part 208—Capital Adequacy Guidelines For State Member Banks: Risk-Based Measure

4. The sixth undesignated paragraph of section I of appendix A to part 208 is amended by adding the words "and interest rate risk, considering the bank's measured excess exposure to interest rate risk (as determined pursuant to attachment VIII) and other relevant factors" to the end of the first sentence.

2. Appendix A to part 208 is amended by adding Attachment VIII as follows:

Attachment VIII—Regulation H, Appendix A

Measurement of Interest Rate Risk for State Member Banks

I. Supervisory Measure

A. Measured Exposure to Interest Rates

A bank's measured exposure to interest rate risk is derived by calculating the bank's net risk-weighted position under two interest rate scenarios, a rise in interest rates and a fall in interest rates. If the bank's net risk-weighted position is positive under both scenarios, then the bank's measured exposure would be equal to zero. If the bank's net risk-weighted position is negative under one or both of the scenarios, then the bank's measured exposure would be equal to the larger decline in the net economic value of the bank under the two scenarios.

B. Calculation of Net Risk-Weighted Position

A bank's net risk-weighted position is calculated by multiplying its assets, liabilities, and off-balance-sheet positions by the appropriate risk weight for each scenario. The sum of the weighted values represents the net risk-weighted position or the dollar amount by which the bank's net economic value is estimated to change in response to each scenario.

The calculation is: (Assets Risk Weights) – (Liabilities Risk Weights) + (Off-Balance-Sheet Positions Risk Weight) = Net Risk Weighted Position. The resulting number is expressed as a percent of total assets and is the primary quantitative measure that would be used to evaluate a bank's measured exposure to IRR.

1. *Risk Weights.* For use in supervisory calculation of a bank's interest rate risk, reported asset, liability and off-balance-sheet positions will be multiplied by corresponding risk weights. The risk-weights estimate the sensitivity of the present value of each position to the specified interest rate scenario. The supervisory risk weights apply general assumptions regarding coupon rates and other characteristics of the underlying assets, liabilities, and off-balance-sheet instruments. Table 1 shows the risk weights developed for a 200 basis point parallel rise and fall in interest rates.

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

Risk Weights

Table 1

Amortizing Instruments

Timeband	Scenario 1: 200 Basis Point Rise — % Change in Present Value (Risk Weights)	Scenario 2: 200 Basis Point Decline — % Change in Present Value (Risk Weights)
0-3 months	-0.10%	0.10%
3-12 months	-0.50%	0.60%
1-3 Years	-1.60%	1.70%
3-5 Years	-3.00%	3.10%
5-10 Years	-5.30%	3.40%
10-20 Years	-8.80%	5.90%
Over 20 Years	-9.20%	3.60%

All Other Instruments

0-3 months	-0.25%	0.25%
3-12 months	-1.20%	1.20%
1-3 Years	-3.50%	3.70%
3-5 Years	-6.40%	7.00%
5-10 Years	-10.20%	11.70%
10-20 Years	-14.90%	19.00%
Over 20 Years	-17.60%	24.60%

Liabilities

0-3 months	0.25%	-0.25%
3-12 months	1.20%	-1.20%
1-3 Years	3.70%	-3.90%
3-5 Years	6.90%	-7.50%
5-10 Years	11.60%	-13.50%
10-20 Years	18.70%	-24.50%
Over 20 Years	24.00%	-36.00%

Zero or Low Coupon Securities

0-3 months	-0.25%	0.25%
3-12 months	-1.20%	1.20%
1-3 Years	-3.70%	3.90%
3-5 Years	-7.40%	8.00%
5-10 Years	-13.30%	15.60%
10-20 Years	-24.90%	33.50%
Over 20 Years	-38.00%	61.90%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

2. *Reported Assets, Liabilities, and Off-Balance-Sheet Positions.* Assets, liabilities, and off-balance-sheet positions will be reported within the appropriate category and time band based on their remaining maturity, next repricing, average life, or other means as directed below.

C. Summary of Asset, Liability, and Off-Balance-Sheet Categories

1. *Adjustable-Rate Assets.* Adjustable-rate mortgage loans and adjustable-rate mortgage securities.

2. *Amortizing Fixed-rate Loans and Securities.* Fixed-rate mortgage securities, and asset-backed securities; fixed-rate mortgage loans, consumer loans and other instruments that involve scheduled periodic amortization of principal.

3. *Zero- or Low-Coupon Assets.* Securities with either no periodic interest payments or stated coupons of 2 percent or lower.

4. *Trading Account Items.* Trading account assets and related off-balance-sheet positions.

5. *High-risk Mortgage Security.* Mortgage derivative products that, at the time of purchase or at any subsequent time, that:

(a) Have an expected weighted average life greater than 10.0 years; or

(b) Have an expected weighted average life that:

(i) Extends by more than 4.0 years, assuming an immediate and sustained parallel shift in the yield curve of plus 300 basis points; or

(ii) Shortens by more than 6.0 years, assuming an immediate and sustained parallel shift in the yield curve of minus 300 basis points; or

(c) Has a change in price of greater than 17 percent, assuming an immediate sustained shift in the yield curve of plus or minus 300 basis points.

6. *All Other Assets.* All other interest-sensitive instruments, which are assumed to involve scheduled periodic payments of interest and the payment of principal at maturity.

7. *Liabilities.* All deposits and all non-deposit liabilities whose values are sensitive to movements in interest rates.

8. *Off-Balance-Sheet Items.* (1) Interest rate contracts, including swaps, forwards, options, and futures; (2) mortgage related fixed-rate commitments and other off-balance-sheet derivative instruments whose value depends on the value of an underlying asset or index with amortizing characteristics.

D. Summary of Time Intervals for Maturity and Repricing

Assets, liabilities and off-balance-sheet items are assigned (in part or in total) to one of seven maturity ranges:

- Up to 3 Months,
- 3 to 12 Months,
- 1 to 3 Years,
- 3 to 5 Years,
- 5 to 10 Years,
- 10 to 20 Years,
- Greater than 20 years.

E. Summary of Maturity and Repricing

1. *Maturity and Repricing—In General.* Except for mortgage derivative products and nonmaturity deposits, the remaining maturity of an asset, liability, or off-balance-sheet item is determined by the remaining time before maturity, or next actual or potential repricing date, associated with the outstanding principal or notional balances as specified by contract or agreement.

2. *Maturity and Repricing for Mortgage Derivative Products*—(a) *Use of Expected Average Life.* Maturity and repricing for mortgage derivative products other than high-risk mortgage securities will be defined as their current expected average life as determined by bank management.[2] Maturity and repricing of "high-risk" mortgage derivative products may be estimated by bank management. Otherwise, maturity and repricing of such products will be assumed to be in the "Greater Than 20 Years" time band.

(b) *Mortgage Derivative Products Defined.* Mortgage derivative products are defined as interest-only and principal-only stripped mortgage-backed securities (IOs and POs), tranches or collateralized mortgage obligations (CMOs) and real estate mortgage investment conduits (REMICs), CMO and REMIC residual securities and other instruments having the same characteristics as these securities.

3. *Maturity and Repricing for Nonmaturity Deposits*—(a) *Management determination of repricing and maturity.* Repricing and maturity for nonmaturity deposits is determined by bank management based on its own assumptions and experience, subject to the following constraints:

(i) Repricing and maturity for DDAs and MMDAs may not exceed three years, with a maximum of 40% of these balances in the "1–3 year" time band; and

(ii) Repricing and maturity for savings and NOW account balances may not exceed five years, with a maximum of 40% of the total of these balances in the "3–5 year" time band.

(b) *Nonmaturity deposits.* Nonmaturity deposits are defined as demand deposit accounts (DDAs), money market deposit accounts (MMDAs), savings accounts, and negotiable order of withdrawal accounts (NOWs).

F. Example of the Interest Rate Risk Measure

Table 2 is an interest rate risk worksheet that illustrates the method of which a bank's Net Risk-Weighted Position is calculated.

BILLING CODE 4810-33-M; 6210-01-M; 6714-01-M

[2] All underlying assumptions used in calculating the average life of these instruments must be reasonable and available for examiner review. For example, if an institution's prepayment assumptions differ significantly from the median prepayment assumptions of several major dealers as selected by examiners, the examiners may use these median prepayment assumptions in determining the appropriate average life of the instrument.

Interest Rate Risk Worksheet (200 Basis Point Rising Rate Scenario)
DRAFT

Table 2

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	-0.10%	($6)	
(b) 3 to 12 months	$4,950	-0.50%	($25)	
(c) 1 to 3 years	$4,050	-1.60%	($65)	
(d) 3 to 5 years	$4,166	-3.00%	($125)	
(e) 5 to 10 years	$6,620	-5.30%	($351)	
(f) 10 to 20 years	$6,454	-8.80%	($568)	
(g) Greater than 20 years	$10,430	-9.20%	($960)	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	-0.25%	($3)	
(b) 3 to 12 months	$1,000	-1.20%	($12)	
(c) 1 to 3 years	$1,000	-3.70%	($37)	
(d) 3 to 5 years	$0	-7.40%	$0	
(e) 5 to 10 years	$0	-13.30%	$0	
(f) 10 to 20 years	$0	-24.90%	$0	
(g) Greater than 20 years	$0	-38.00%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	-0.25%	($67)	
(b) 3 to 12 months	$28,432	-1.20%	($341)	
(c) 1 to 3 years	$31,136	-3.50%	($1,090)	
(d) 3 to 5 years	$19,728	-6.40%	($1,263)	
(e) 5 to 10 years	$10,564	-10.20%	($1,078)	
(f) 10 to 20 years	$8,837	-14.90%	($1,317)	
(g) Greater than 20 years	$9,462	-17.60%	($1,665)	
4. High-risk mortgage securities				
(a) Self-reporting	$2,000		$160	
(b) Risk weighting	$1,000	-38.00%	($380)	
5. Total Interest-Sensitive Assets	$183,000		($9,190)	($9,190)
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$186,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$23,083	0.25%	$58	
(b) 3 to 12 months	$74,582	1.20%	$895	
(c) 1 to 3 years	$51,321	3.70%	$1,899	
(d) 3 to 5 years	$17,090	6.90%	$1,179	
(e) 5 to 10 years	$64	11.60%	$7	
(f) 10 to 20 years	$0	18.70%	$0	
(g) Greater than 20 years	$0	24.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		$4,038	
V. NONINTEREST-SENSITIVE LIABILITIES	$860			
VI. TOTAL LIABILITIES	$167,000		$4,038	$4,038
VII. EQUITY CAPITAL	$19,001			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	-0.25%	($10)	
(b) 3 to 12 months	$500	-1.20%	($6)	
(c) 1 to 3 years	($4,050)	-3.50%	$142	
(d) 3 to 5 years	($450)	-6.40%	$29	
(e) 5 to 10 years	$0	-10.20%	$0	
(f) 10 to 20 years	$0	-14.90%	$0	
(g) Greater than 20 years	$0	-17.60%	$0	
2. Mortgage and other amortizing contracts				
(a) Up to 3 months	$1,000	-0.10%	($1)	
(b) 3 to 12 months	$0	-0.50%	$0	
(c) 1 to 3 years	($1,000)	-1.60%	$16	
(d) 3 to 5 years	$0	-3.00%	$0	
(e) 5 to 10 years	$0	-5.30%	$0	
(f) 10 to 20 years	$0	-8.80%	$0	
(g) Greater than 20 years	$0	-9.20%	$0	
3. Total Off-Balance-Sheet Positions	$0		$170	$170
Net Risk Weighted Position				($4,981.80)
Net Position/ Assets				-2.68%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

II. Internal Measure

A state member bank's internal measure for interest rate risk will be evaluated and, if the measure is used in assessing the bank's measured exposure, calculated according to the following interest rate scenario:

Maturity	Scenario annual horizon (basis points)
0–3 Months	200
3–12 Months	200
1–3 Years	200
3–5 Years	200
5–10 Years	200
10–20 Years	200
Over 20 Years	200

This signature page relates to the Joint Notice of Proposed Rulemaking title Risk-Based Capital Standards: Interest Rate Risk, Office of the Comptroller of the Currency, Department of the Treasury, Docket Number R–0802.

By Order of the Board of Governors of the Federal Reserve System.

Dated: August 27, 1993.

William Wiles,

Secretary of the Board.

FEDERAL DEPOSIT INSURANCE CORPORATION

Authority and Issuance

For reasons set out in the joint preamble, part 325 of chapter III of title 12 of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 325—CAPITAL MAINTENANCE

1. The authority citation for part 325 continues to read as follows:

Authority: 12 U.S.C. 1815(a), 1815(b), 1816, 1818(a), 1818(b), 1818(c), 1818(t), 1819(Tenth), 1828(c), 1828(d), 1828(i), 1828(n), 1828(o), 1831o, 3907, 3909; Public Law 102–233, 105 Stat. 1761, 1789, 1790 (12 U.S.C. 1831n note); Public Law 102–242, 105 Stat. 2236, 2386 (12 U.S.C. 1828 note).

ALTERNATIVE ONE (MINIMUM CAPITAL STANDARD APPROACH) FOR APPENDIX A TO SUBPART A OF PART 325—THE STATEMENT OF POLICY ON RISK-BASED CAPITAL

2. Section II of appendix A to subpart A of part 325 is amended by revising the first undesignated paragraph under paragraph A and by adding a new paragraph F. to read as follows:

Appendix A to Subpart A of Part 325—Statement of Policy on Risk-Based Capital

* * * * *

A. * * *

Under the risk-based capital framework, a bank's balance sheet assets and credit equivalent amounts of off-balance-sheet items are assigned to one of four broad risk categories according to the obligor or, if relevant, the guarantor or the nature of the collateral. The aggregate dollar amount in each category is then multiplied by the risk weight assigned to that category. In addition, a risk-weighted asset amount of a bank's excess measured exposure to interest rate risk (as determined pursuant to paragraph II.F. of this appendix) is calculated. The resulting weighted values from each of the four risk weight categories and the risk-weighted asset amount for interest rate risk are added together and this sum is the risk-weighted assets total that, as adjusted,[11] comprises the denominator of the risk-based capital ratio.

* * * * *

F. *Risk Weighted Asset Amount for Excessive Interest Rate Risk Exposure.* If a bank is required to maintain additional capital for excessive interest rate risk exposure, as determined in accordance with appendix C to subpart A of part 325, the dollar amount of this additional capital requirement for interest rate risk should be multiplied by 12.5. The resulting amount should be included in the denominator for risk-weighted assets. For example, if the capital required for excessive interest rate risk under appendix C is $100,000, the amount to be included in risk-weighted assets for this interest rate risk exposure will be $1,250,000. Thus, consistent with the 8 percent minimum total risk-based capital ratio that banks are required to maintain under this risk-based capital policy statement, if $100,000 in additional capital is required to be maintained for interest rate risk pursuant to appendix C, this amount will equal 8 percent of the $1,250,000 additional amount to be included in risk-weighted assets.

ALTERNATIVE TWO (RISK ASSESSMENT APPROACH) FOR APPENDIX A TO SUBPART A OF PART 325—THE STATEMENT OF POLICY ON RISK-BASED CAPITAL

3. The fifth undesignated paragraph of appendix A to subpart A of part 325 (the FDIC's Statement of Policy on Risk-Based Capital) is revised to read as follows:

Appendix A to Subpart A of Part 325—Statement of Policy on Risk-Based Capital

* * * * *

The risk-based capital ratio focuses principally on broad categories of credit risk; however, the ratio does not take account of many other factors that can affect a bank's financial condition. These factors include overall interest rate risk exposure; liquidity, funding and market risks; the quality and level of earnings; investment, loan portfolio, and other concentrations of credit risk; certain risks arising from nontraditional activities; the quality of loans and investments; the effectiveness of loan and investment policies; and management's overall ability to monitor and control financial and operating risks, including the risk presented by concentrations of credit and nontraditional activities. In addition to evaluating capital ratios, an overall assessment of capital adequacy must take account of each of these other factors, including, in particular, the level and severity of problem and adversely classified assets as well as a bank's excess measured exposure to interest rate risk. For this reason, the final supervisory judgment on a bank's capital adequacy may differ significantly from the conclusions that might be drawn solely from the absolute level of the bank's risk-based capital ratio.

[11] Any asset deducted from a bank's capital accounts when computing the numerator of the risk-based capital ratio will also be excluded from risk-weighted assets when calculating the denominator for the ratio.

4. Subpart A of part 325 is revised by adding a new appendix C to read as follows:

Appendix C to Subpart A of Part 325—Measurement of and the Assessment of Capital Requirements for Interest Rate Risk

This appendix sets forth a system for measuring IRR and determining if additional capital may be required in order to take adequate account of a bank's interest rate risk.

I. Definitions

A. *Excess Measured Exposure* means the dollar amount of measured exposure to interest rate risk in excess of the supervisory threshold.

B. *Measured Exposure* means the estimated dollar decline in the net economic value of a bank under the specified interest rate scenario(s) as determined pursuant to either a supervisory measure or, where the FDIC deems appropriate, the bank's internal measure of interest rate risk exposure. When the supervisory measure is used to calculate the bank's measured exposure pursuant to section III of this appendix, a bank's measured exposure is derived by calculating the bank's net risk-weighted position.

C. *Net Economic Value of a Bank* means the net present value of its assets minus the net present value of its liabilities plus the net present value of its off-balance-sheet instruments.

D. *Net Risk-Weighted Position* means the sum of all risk-weighted values of the bank's assets, liabilities and off-balance-sheet positions. For purposes of the supervisory measure, this number represents the amount by which the bank's net economic value is estimated to change in response to the interest rate scenario(s). This number may be expressed as a percentage of total assets or in dollar amounts.

E. *Supervisory Threshold* means the equivalent of 1 percent of the bank's total assets.

II. Applicability

A. Exemption Test for Banks with Low Risk

1. *General Rule.* Except as provided in paragraph A.2. a bank's excess measured exposure will be calculated pursuant to this appendix unless:

(a) The total notional principle amount of the bank's off-balance-sheet interest rate

contracts is less than 10 percent of total assets; and

(b) 15 percent of the sum of fixed- and floating-rate loans and securities that mature or reprice beyond 5 years is less than 30 percent of total capital.

2. *Discretion of the FDIC.* The FDIC may require the calculation of a bank's excess measured exposure if the FDIC determines, based on an overall assessment of the bank's financial condition, that such calculation is necessary to assess the capital adequacy of the bank.

III. Supervisory Measure

A. Measured Exposure to Interest Rates

A bank's measured exposure to interest rate risk must be calculated pursuant to the supervisory measure as specified in section III.C. and III.D. of this appendix C.

B. Calculation of Net Risk-Weighted Position

A bank's net risk-weighted position is calculated by multiplying its assets, liabilities, and off-balance-sheet positions by the appropriate risk weight [1] for each specified rate scenario. The sum of the weighted values represents the net risk-weighted position or the dollar amount by which the bank's net economic value is estimated to change in response to each scenario.

The calculation is as follows:

(Assests × Risk Weights) – (Liabilities × Risk Weights) + (Off-Balance-Sheet Positions × Risk Weight) = Net Risk Weighted Position

The resulting number is expressed in dollars and may be divided by total assets and expressed as a percent of total assets. It is the primary quantitative measure that would be used to evaluate a bank's measured exposure to interest rate risk.

BILLING CODE 4810–33–M; 6210–01–M; 6714–01–M

[1] Risk weights estimate the sensitivity of the present value of assets, liabilities and off-balance-sheet positions to the specified interest rate scenario(s). The supervisory risk weights apply general assumptions regarding coupon rates and other characteristics of the underlying assets, liabilities and off-balance-sheet instruments. Table 1 shows the risk weights developed for a [200 basis point] parallel rise and fall in interest rates.

Risk Weights

Table 1

Amortizing Instruments

Timeband	Scenario 1: 200 Basis Point Rise — % Change in Present Value (Risk Weights)	Scenario 2: 200 Basis Point Decline — % Change in Present Value (Risk Weights)
0-3 months	-0.10%	0.10%
3-12 months	-0.50%	0.60%
1-3 Years	-1.60%	1.70%
3-5 Years	-3.00%	3.10%
5-10 Years	-5.30%	3.40%
10-20 Years	-8.80%	5.90%
Over 20 Years	-9.20%	3.60%

All Other Instruments

0-3 months	-0.25%	0.25%
3-12 months	-1.20%	1.20%
1-3 Years	-3.50%	3.70%
3-5 Years	-6.40%	7.00%
5-10 Years	-10.20%	11.70%
10-20 Years	-14.90%	19.00%
Over 20 Years	-17.60%	24.60%

Liabilities

0-3 months	0.25%	-0.25%
3-12 months	1.20%	-1.20%
1-3 Years	3.70%	-3.90%
3-5 Years	6.90%	-7.50%
5-10 Years	11.60%	-13.50%
10-20 Years	18.70%	-24.50%
Over 20 Years	24.00%	-36.00%

Zero or Low Coupon Securities

0-3 months	-0.25%	0.25%
3-12 months	-1.20%	1.20%
1-3 Years	-3.70%	3.90%
3-5 Years	-7.40%	8.00%
5-10 Years	-13.30%	15.60%
10-20 Years	-24.90%	33.50%
Over 20 Years	-38.00%	61.90%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

C. Calculation of Measured Exposure

If the net risk-weighted position is positive under the specified interest rate scenario(s), the measured exposure would be equal to zero. If the net risk-weighted position is negative under the specified interest rate scenario(s), the measured exposure would be equal to the larger decline in the net economic value of the bank.

D. Calculation of Excess Measured Exposure

1. The dollar amount of the supervisory threshold would be subtracted from the absolute dollar amount of the measured exposure. The positive difference would equal the excess measured exposure.

Measured Exposure − (.01Total Assets)=Excess Measured Exposure

2. If the amount of the supervisory threshold were greater than the measured exposure, the excess measured exposure would be zero.

E. Interest Rate Scenario

Measured exposure will be estimated for a uniform increase and decrease of 2 percentage points (200 basis points) in market interest rates at all maturities.

IV. Reporting Requirements

Assets, liabilities and off-balance-sheet positions will be reported within the appropriate category and time band based upon their remaining maturities, nearest repricing dates, average life or other means as directed below.

A. Summary of Assets, Liabilities and Off-Balance-Sheet Categories

1. *Adjustable-Rate Assets.* Adjustable-rate mortgage loans and adjustable-rate mortgage securities.

2. *Fixed-Rate Assets.* Fixed-rate mortgage securities and asset-backed securities; fixed-rate mortgage loans, consumer loans and other instruments that have scheduled periodic amortization of principal.

3. *Zero- or Low-Coupon Assets.* Securities with either no periodic interest payments or with stated coupons of 2 percent or lower.

4. *Trading Account Assets.* Trading account assets and related off-balance-sheet instruments.

5. *High-Risk Mortgage Securities.* Mortgage derivative products that, at the time of purchase or at any subsequent time:

(a) Have an expected weighted average life greater than 10.0 years; or

(b) Have an expected weighted average life that:

(i) Extends by more than 4.0 years, assuming an immediate and sustained parallel shift in the yield curve of plus 300 basis points; or

(ii) Shortens by more than 6.0 years, assuming an immediate and sustained parallel shift in the yield curve of minus 300 basis points; or

(c) Has a change in price of greater than 17 percent, assuming an immediate sustained parallel shift in the yield curve of plus or minus 300 basis points.

6. *All Other Assets.* All other interest-sensitive instruments, which have scheduled periodic payments of interest and the payment of principal at maturity.

7. *Liabilities.* All deposits and all non-deposit liabilities whose values are sensitive to movements in interest rates.

8. *Off-Balance-Sheet Positions.* (a) Interest-rate contracts including swaps, forwards, options, and futures.

(b) Mortgage-related fixed-rate commitments and other off-balance-sheet derivative instruments whose value depends on the value of an underlying asset or index with amortizing characteristics.

B. Summary of Time Bands for Maturity and Repricing

Assets, liabilities and off-balance-sheet items are assigned (in part or in total) to one of seven maturity ranges:

- Up to 3 months,
- 3 to 12 months,
- 1 to 3 years,
- 3 to 5 years,
- 5 to 10 years,
- 10 to 20 years,
- Greater than 20 years.

C. Summary of Maturity and Repricing Instructions

1. *Maturity and Repricing for Assets, Liabilities and Off-Balance-Sheet Positions.* Remaining time before maturity, or next actual or potential repricing date, associated with outstanding principal or notional balances as specified in a contract or agreement with the exception of:

(a) *Maturity and Repricing for Mortgage Derivative Products.* Mortgage derivative products are defined as stripped mortgage-backed securities, tranches of collateralized mortgage obligations (CMOs) and real estate mortgage investment conduits (REMICs), CMO and REMIC residual securities and other instruments having the same characteristics as these securities.

For mortgage derivative products, other than those which may be deemed as a "high-risk mortgage security" by the FDIC, current average life will be reported in lieu of maturity or repricing dates in the "All Other Securities" category.[2] The carrying value of "high-risk mortgage securities" will be reported in the "High-Risk Mortgage Securities" category.[3] If not, maturity and repricing of high-risk mortgage securities will be as if the entire balance were a zero or low coupon instrument in the longest time band.

(b) *Maturity and Repricing for Non-Maturity Deposits.*

(i) *Non-maturity deposits* are defined as Demand Deposits Accounts (DDAs), Money Market Deposit Accounts (MMDAs), savings accounts, and Negotiable Order of Withdrawal accounts (NOWs).

(ii) *Management determination of repricing and maturity.* Repricing and maturity for non-maturity deposits are determined by bank management based on its own assumptions and experience, subject to the following constraints:

(1) Repricing and maturity for Demand Deposit Accounts (DDAs) and Money Market Deposit Accounts (MMDAs) may not exceed three years, with a maximum of 40 percent of these balances in the "1–3 year" time band; and

(2) Repricing and maturity for savings and Negotiable Order of Withdrawal (NOW) account balances may not exceed five years, with a maximum of 40 percent of the total of these balances in the "3–5 year" time band.

(iii) *Maturity and Repricing for Off-Balance-Sheet Positions.* Off-balance-sheet positions with option characteristics (e.g, options, caps, floors) are reported separately from those representing firm commitments (e.g., swaps, futures, and forward-rate agreements). Mortgage-related fixed rate commitments and other off-balance-sheet derivative instruments whose value depends on the value of an underlying asset or index with amortizing characteristics are reported separately.

D. Example of the Interest Rate Risk Measure

Tables 2 and 3 are interest rate risk worksheets that illustrate the method by which a bank's Net Risk-Weighted Position is calculated.

BILLING CODE 4810–33–M; 6210–01–M; 6714–01–M

[2] All underlying assumptions used in calculating the average life of these instruments must be reasonable and available for examiner review. For example, if an institution's prepayment assumptions differ significantly from the median prepayment assumptions of several major dealers as selected by examiners, the examiners may use these median prepayment assumptions in determining the appropriate average life of the instrument.

[3] The interest rate sensitivity of high-risk mortgage securities purchased after February 10, 1992 must be reported in the memorandum items. The interest rate sensitivity of "high-risk mortgage securities" purchased prior to February 10, 1992 can be reported as a memorandum item.

Interest Rate Risk Worksheet (200 Basis Point Rising Rate Scenario)

DRAFT

Table 2

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	-0.10%	($6)	
(b) 3 to 12 months	$4,950	-0.50%	($25)	
(c) 1 to 3 years	$4,050	-1.60%	($65)	
(d) 3 to 5 years	$4,166	-3.00%	($125)	
(e) 5 to 10 years	$6,620	-5.30%	($351)	
(f) 10 to 20 years	$6,454	-8.80%	($568)	
(g) Greater than 20 years	$10,430	-9.20%	($960)	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	-0.25%	($3)	
(b) 3 to 12 months	$1,000	-1.20%	($12)	
(c) 1 to 3 years	$1,000	-3.70%	($37)	
(d) 3 to 5 years	$0	-7.40%	$0	
(e) 5 to 10 years	$0	-13.30%	$0	
(f) 10 to 20 years	$0	-24.90%	$0	
(g) Greater than 20 years	$0	-38.00%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	-0.25%	($67)	
(b) 3 to 12 months	$28,432	-1.20%	($341)	
(c) 1 to 3 years	$31,136	-3.50%	($1,090)	
(d) 3 to 5 years	$19,728	-6.40%	($1,263)	
(e) 5 to 10 years	$10,564	-10.20%	($1,078)	
(f) 10 to 20 years	$8,837	-14.90%	($1,317)	
(g) Greater than 20 years	$9,462	-17.60%	($1,665)	
4. High-risk mortgage securities				
(a) Self-reporting	$2,000		$160	
(b) Risk weighting	$1,000	-38.00%	($380)	
5. Total Interest-Sensitive Assets	$183,000		($9,190)	($9,190)
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$186,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$23,083	0.25%	$58	
(b) 3 to 12 months	$74,582	1.20%	$895	
(c) 1 to 3 years	$51,321	3.70%	$1,899	
(d) 3 to 5 years	$17,090	6.90%	$1,179	
(e) 5 to 10 years	$64	11.60%	$7	
(f) 10 to 20 years	$0	18.70%	$0	
(g) Greater than 20 years	$0	24.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		$4,038	
V. NONINTEREST-SENSITIVE LIABILITIES	$860			
VI. TOTAL LIABILITIES	$167,000		$4,038	$4,038
VII. EQUITY CAPITAL	$19,081			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	-0.25%	($10)	
(b) 3 to 12 months	$500	-1.20%	($6)	
(c) 1 to 3 years	($4,050)	-3.50%	$142	
(d) 3 to 5 years	($450)	-6.40%	$29	
(e) 5 to 10 years	$0	-10.20%	$0	
(f) 10 to 20 years	$0	-14.90%	$0	
(g) Greater than 20 years	$0	-17.60%	$0	
2. Mortgage and other [illegible] contracts				
(a) Up to 3 months	$1,000	-0.10%	($1)	
(b) 3 to 12 months	$0	-0.50%	$0	
(c) 1 to 3 years	($1,000)	-1.60%	$16	
(d) 3 to 5 years	$0	-3.00%	$0	
(e) 5 to 10 years	$0	-5.30%	$0	
(f) 10 to 20 years	$0	-8.80%	$0	
(g) Greater than 20 years	$0	-9.20%	$0	
3. Total Off-Balance-Sheet Positions	$0		$170	$170
Net Risk Weighted Position				[illegible]
Net Position/ Assets				-2.68%

Interest Rate Risk Worksheet (200 Basis Point Declining Rate Scenario)

DRAFT — Table 3

REPORTING INSTITUTION: Sample Bank

Date: 12/31/92

$ Thousands

	(A) TOTAL	(B) Risk Weights	(C) Risk Weighted Position (A) x (B)	(D) Total Risk Weighted Position
I. INTEREST-SENSITIVE ASSETS				
1. ARMs, FRMs, asset-backed securities, consumer loans				
(a) Up to 3 months	$5,500	0.10%	$6	
(b) 3 to 12 months	$4,950	0.60%	$30	
(c) 1 to 3 years	$4,050	1.70%	$69	
(d) 3 to 5 years	$4,166	3.10%	$129	
(e) 5 to 10 years	$6,620	3.40%	$225	
(f) 10 to 20 years	$6,454	5.90%	$381	
(g) Greater than 20 years	$10,430	3.60%	$375	
2. Zero or low coupon securities				
(a) Up to 3 months	$1,000	0.25%	$3	
(b) 3 to 12 months	$1,000	1.20%	$12	
(c) 1 to 3 years	$1,000	3.90%	$39	
(d) 3 to 5 years	$0	8.00%	$0	
(e) 5 to 10 years	$0	15.60%	$0	
(f) 10 to 20 years	$0	33.50%	$0	
(g) Greater than 20 years	$0	61.90%	$0	
3. "All other" securities, loans, & trading account				
(a) Up to 3 months	$26,672	0.25%	$67	
(b) 3 to 12 months	$28,432	1.20%	$341	
(c) 1 to 3 years	$31,136	3.70%	$1,152	
(d) 3 to 5 years	$19,728	7.00%	$1,381	
(e) 5 to 10 years	$10,564	11.70%	$1,236	
(f) 10 to 20 years	$8,837	19.00%	$1,679	
(g) Greater than 20 years	$9,462	24.60%	$2,328	
4. High-risk mortgage securities				
(a) Self-reporting	$2,000		($200)	
(b) Risk weighting	$1,000	-38.00%	($380)	
5. Total Interest-Sensitive Assets	$183,000		$8,871	$8,871
II. ALL OTHER ASSETS	$3,000			
III. TOTAL ASSETS	$186,000			
IV. INTEREST-SENSITIVE LIABILITIES				
1. Non-maturity deposits, time deposits and "all other"				
(a) Up to 3 months	$38,583	-0.25%	($96)	
(b) 3 to 12 months	$77,582	-1.20%	($931)	
(c) 1 to 3 years	$39,821	-3.90%	($1,553)	
(d) 3 to 5 years	$10,090	-7.50%	($757)	
(e) 5 to 10 years	$64	-13.50%	($9)	
(f) 10 to 20 years	$0	-24.50%	$0	
(g) Greater than 20 years	$0	-36.00%	$0	
2. Total Interest-Sensitive Liabilities	$166,140		($3,346)	
V. NONINTEREST-SENSITIVE LIABILITIES	$860			
VI. TOTAL LIABILITIES	$167,000		($3,346)	($3,346)
VII. EQUITY CAPITAL	$19,001			
VIII. OFF-BALANCE-SHEET POSITIONS				
1. Interest rate contracts				
(a) Up to 3 months	$4,000	0.25%	$10	
(b) 3 to 12 months	$500	1.20%	$6	
(c) 1 to 3 years	($4,050)	3.70%	($150)	
(d) 3 to 5 years	($450)	7.00%	($32)	
(e) 5 to 10 years	$0	11.70%	$0	
(f) 10 to 20 years	$0	19.00%	$0	
(g) Greater than 20 years	$0	24.60%	$0	
2. Mortgage and other amortizing contracts				
(a) Up to 3 months	$1,000	0.10%	$1	
(b) 3 to 12 months	$0	0.60%	$0	
(c) 1 to 3 years	($1,000)	1.70%	($17)	
(d) 3 to 5 years	$0	3.10%	$0	
(e) 5 to 10 years	$0	3.40%	$0	
(f) 10 to 20 years	$0	5.90%	$0	
(g) Greater than 20 years	$0	3.60%	$0	
3. Total Off-Balance-Sheet Positions	$0		($181)	($181)
Net Risk Weighted Position				$5,344.31
Net Position/ Assets				2.87%

BILLING CODE 4810-33-C; 6210-01-C; 6714-01-C

V. Use of Internal Measures

A. Supervisory Measure

Except as provided in paragraph B, a bank's measured exposure to interest rate risk will be calculated pursuant to the supervisory measure set forth in section III of this appendix.

B. Use of Internal Measure

During an examination or at the request of a bank, the FDIC will evaluate any internal measure of interest rate risk exposure. If the bank's internal measure is acceptable to the FDIC, in its sole discretion, then the bank's measure may be used in place of the supervisory model in determining the bank's excess measured exposure.

C. Acceptable Internal Measure

In determining whether a bank's internal measure of exposure to interest rate risk is acceptable, the FDIC will consider:

1. Whether the assumptions and structure of the supervisory measure accurately reflect the actual positions, and whether the internal measure provides a more precise measurement of the change in economic value of the bank;

2. Whether the internal measure makes use of generally accepted techniques in estimating measured exposure;

3. Whether the internal measure is appropriate to the nature and scope of the bank's activities; and

4. Whether the internal measure provides an adequate indication of the exposure of the bank to interest rate risk in all material respects.

D. Requirement To Use Internal Measure

The FDIC may require that a bank use an existing internal measure for purposes of determining interest rate risk exposure if:

1. The supervisory measure does not adequately characterize the interest rate risk of the bank's positions; or

2. Use of the supervisory measure would materially misrepresent the bank's actual interest rate risk exposure.

The excess measured exposure determined by the internal measure would then be utilized to determine the risk-based capital requirement.

E. Reporting Requirements

In addition to completing the reporting requirements associated with the supervisory measure, a bank utilizing the internal measure would also report the interest rate sensitivity of its assets, liabilities and off-balance-sheet positions, as determined by its internal measure, on a separate reporting schedule.

F. Interest Rate Scenario(s)

The interest rate scenario(s) specified for the supervisory model (as set forth in section III.E. of this appendix) should also be utilized in conjunction with a bank's internal measure.

By order of the Board of Directors.

Dated at Washington, DC, this 9th day of June, 1993.

Federal Deposit Insurance Corporation.

Hoyle L. Robinson,

Executive Secretary.

[FR Doc. 93–22149 Filed 9–13–93; 8:45 am]

BILLING CODE 4810-33-M, 6210-01-M, 6714-01-M

federal register

Tuesday
September 14, 1993

Part IV

Department of Education

Office of Special Education and Rehabilitative Services; Technology, Educational Media, and Materials for Individuals With Disabilities Program; Notice

DEPARTMENT OF EDUCATION

Office of Special Education and Rehabilitative Services; Technology, Educational Media, and Materials for Individuals With Disabilities Program

AGENCY: Department of Education.

ACTION: Notice of final priority for Fiscal Years 1994–1995.

SUMMARY: The Secretary announces a final priority for the Technology, Educational Media, and Materials for Individuals with Disabilities Program to ensure effective use of program funds and to direct funds to an area of identified need during fiscal years 1994 and 1995.

EFFECTIVE DATE: This priority takes effect either 45 days after publication in the Federal Register or later if the Congress takes certain adjournments. If you want to know the effective date of this priority, call or write the Department of Education contact person.

FOR FURTHER INFORMATION CONTACT: Linda Glidewell, U.S. Department of Education, 400 Maryland Avenue, SW., room 3524 Switzer Building, Washington, DC 20202–2640. Telephone: (202) 205–9864. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m. Eastern time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of this program is to support projects and centers for advancing the availability, quality, use, and effectiveness of technology, assistive technology, educational media, and materials in the education of children and youth with disabilities and in the provision of early intervention services to infants and toddlers with disabilities.

On June 8, 1993, the Secretary published a notice of proposed priority for this program in the Federal Register (58 FR 32206).

This priority supports the National Education Goals by improving our understanding of how to enable children and youth with disabilities to reach the high levels of academic achievement called for by the Goals.

Note: This notice of final priority does not solicit applications. A notice inviting applications under this competition is published in a separate notice in this issue of the Federal Register.

Analysis of Comments and Changes

In response to the Secretary's invitation in the notice of proposed priority, four parties submitted comments. An analysis of the comments and of the changes in the proposed priority follows. Technical and other minor changes—and suggested changes the Secretary is not legally authorized to make under the applicable statutory authority—are not addressed.

Comment: One commenter asked if "education and related services," as stated in the proposed priority, would include the transition planning component of the individualized education plan (IEP) process.

Discussion: The phrase "education and related services" used in the priority is a broad designation that includes the specific components of special education and related services called for in the Individual with Disabilities Education Act (IDEA). The Secretary believes that transition planning associated with the IEP would therefore be included.

Changes: None.

Comment: One commenter recommended that if projects must address and evaluate all of the specific issues and problem elements discussed in the background section of the priority then the project period should be extended to 60 months. Another commenter stated that the 3-year period with an optional six-month extension for dissemination appeared to be a reasonable length of time to accomplish the goals of the priority.

Discussion: The specific project requirements are contained in the "Priority" section, and include the statement that the priority supports projects that "take into account" the challenges described in the background section. The priority does not require that projects address and evaluate all of the specific issues and problem elements discussed in the background section. To do so would result in a priority that was needlessly complex and prescriptive, and that could not be adequately addressed even with the suggested 60-month project duration. The Secretary believes that a 36-month award with an optional six-month extension is appropriate for the tasks specified in the priority section.

Changes: None.

Comment: One commenter recommended that the priority clarify whether the phrases "innovative approaches" and "stages of change" (a phrase used by the commenter but not used in the priority) apply to demonstrating organizational support and professional development, or to technology, media, and materials.

Discussion: The section entitled "Background" begins with a statement of the purpose of this priority, which is "to support projects to develop, demonstrate, evaluate, and disseminate innovative approaches for providing organizational support combined with professional development in the use of technology (including assistive technology), media, and materials in providing education and related services to children and youth with disabilities." The section entitled "Proposed Priority" states that projects will be supported that develop and demonstrate innovative approaches that "take into account" the two challenges described in the "Background" section (i.e.: (1) That a "broad spectrum" of individual and organizational needs must be addressed, and (2) that change processes can be lengthy and can involve different stages). The innovative approaches must "provide the organizational support and professional development in a coordinated and mutually supportive combination * * *", and "must be designed to sustain a meaningful process of change in a range of organizational and individual areas." The Secretary believes that the priority as written is sufficiently clear with regard to innovative approaches and change processes, and that the recommended changes are unnecessary.

Changes: None.

Comment: One commenter recommended that the priority should specify what questions are to be addressed by the evaluation activities of the priority rather than indicate what factors to consider.

Discussion: The evaluation activities and factors must align with the projects proposed design and activities. Given the potential variety of approaches a particular project may pursue, the Secretary believes that it would be overly prescriptive to specify the activities to be addressed by the required evaluation plan.

Changes: None.

Comment: One commenter recommended that the priority should be scheduled for a second or third quarter award to permit projects to make use of summer months for planning and preparation.

Discussion: The Secretary agrees that earlier award dates are helpful to projects, and the Department is involved in a concerted effort to announce priorities in sufficient time to allow for second and third quarter awards.

Changes: None.

Priority

Under 34 CFR 75.105(c)(3) the Secretary gives an absolute preference to applications that meet the following priority. The Secretary will fund under this competition only applications that meet this absolute priority:

Absolute Priority—Organizational Support and Professional Development in the Use of Technology, Media, and Materials With Children and Youth With Disabilities (CFDA 84.180A)

Background

The purpose of this priority is to support projects to develop, demonstrate, evaluate, and disseminate innovative approaches for providing organizational support combined with professional development in the use of technology (including assistive technology), media, and materials in providing education and related services to children and youth with disabilities.

Technology, media, and materials cannot work in isolation to achieve better outcomes for students with disabilities. In order for these tools to be effective, service providers, such as special educators, regular educators, and related services personnel, must perform a number of functions. These functions include appropriately selecting tools, managing their use in educational settings, integrating tools with curricula and services, and preparing students to use tools effectively. Sustained professional development is needed to prepare service providers to perform these functions.

However, the issue is not solely a matter of professional development. Various forms of organizational support are also required, including not only material resources, but also human resources such as administrative leadership, collaboration, technical assistance, and coordination.

Organizational support and professional development, as discussed here, are not sufficiently available in today's schools. This is due in part to a lack of effective approaches that are feasible in typical educational settings. To be effective, approaches must address two fundamental challenges found by previous Office of Special Education Programs (OSEP)- sponsored projects. First, improved use of technology, media, and materials must address a broad spectrum of interrelated needs at the organizational and individual levels. Organizations need expanded resources, as well as new structures, policies, and perceptions. Teachers need a range of new competencies, as well as new understandings about the nature of learning and instruction. Second, the processes of organizational and professional change can be lengthy and can involve a progression through qualitatively different stages requiring different types of facilitation. Organizations must not only select and implement changes, but must also refine and institutionalize them. Teachers must not only acquire new competencies and understandings, but must also assimilate them into their teaching practice.

Priority

This priority supports projects that—

(a) Develop and demonstrate innovative approaches that take into account the needs and challenges described above. Specifically, the approaches must provide organizational support and professional development in a coordinated and mutually supportive combination to advance the use and effectiveness of technology, media, and materials in providing education and related services to children and youth with disabilities. Further, the approaches must be designed to sustain a meaningful process of change in a range of organizational and individual areas;

(b) Focus on specific segments of the service provider population; specific student disabilities or ages; specific types of technology, media, and materials; or any combination of the above;

(c) Evaluate the approaches they develop with regard to factors that include, but are not limited to: (1) feasibility; (2) adaptability to other sites; (3) student outcomes; and (4) teacher effects on the use of technology, media, and materials in providing education and related services to children and youth with disabilities;

(d) Within the 36-month project period, disseminate information on innovative approaches for providing organizational support combined with professional development in the use of technology (including assistive technology), media, and materials in providing education and related services to children and youth with disabilities.

(e) Coordinate their activities, as appropriate, with recipients of grants under the Technology Related Assistance Act (Pub. L. 100–407).

During the third year of the project, the Department will determine whether or not to fund an optional six-month period. The purpose of the optional period would be for additional dissemination activities arranged with the Department.

Intergovernmental Review

This program is subject to the requirements of Executive Order 12372 and the regulations in 34 CFR part 79. The objective of the Executive order is to foster an intergovernmental partnership and a strengthened federalism by relying on processes developed by State and local governments for coordination and review of proposed Federal financial assistance.

In accordance with the order, this document is intended to provide early notification of the Department's specific plans and actions for this program.

Applicable Program Regulations: 34 CFR part 333.

Program Authority: 20 U.S.C. 1461.

(Catalog of Federal Domestic Assistance Number 84.180, Technology, Educational Media, and Materials for Individuals with Disabilities Program)

Dated: September 9, 1993.

Richard W. Riley,

Secretary of Education.

[FR Doc. 93–22434 Filed 9–13–93; 8:45 am]

BILLING CODE 4000-01-P

federal register

Tuesday
September 14, 1993

Part V

Department of Education

Postsecondary Education Programs for Individuals With Disabilities; Notice

DEPARTMENT OF EDUCATION

Postsecondary Education Programs for Individuals With Disabilities

AGENCY: Department of Education

ACTION: Notice of Final Funding Priority for Fiscal Years 1994 and 1995.

SUMMARY: The Secretary announces a priority for fiscal years 1994 and 1995 under the Postsecondary Education Programs for Individuals with Disabilities. The Secretary takes this action to focus Federal financial assistance on an identified national need for maximizing student potential in postsecondary environments. This priority provides support for a variety of model demonstrations designed to (a) provide services to address the special needs of students with disabilities in postsecondary education programs, (b) expand the capacity of institutions of higher education and other institutions in improving programs and services for students with disabilities, and (c) improve the potential for successful postsecondary outcomes for these students.

EFFECTIVE DATE: This priority takes effect either 45 days after publication in the **Federal Register** or later if the Congress takes certain adjournments. If you want to know the effective date of this priority, call or write the Department of Education contact person.

FOR FURTHER INFORMATION CONTACT: Joseph Clair, U.S. Department of Education, 400 Maryland Avenue, SW., room 4622, Switzer Building, Washington, DC 20202–2644. Telephone: (202) 205–9503. Individuals who use a telecommunications device for the deaf (TDD) may call the TDD number at (202) 205–8170.

SUPPLEMENTARY INFORMATION: The purpose of this program is to provide assistance for the development, operation, and dissemination of specially designed model programs of postsecondary, vocational, technical, continuing, or adult education for individuals with disabilities. Section 625(a)(2) of the Individuals with Disabilities Education Act (IDEA) requires that priority consideration be given to four regional centers for the deaf and to model programs for individuals with disabling conditions other than deafness. Recipients of program funds must coordinate their efforts with and disseminate information about their activities to the National Clearinghouse on Postsecondary Education for Individuals with Disabilities.

This priority supports National Education Goal 5 by assisting students with disabilities in developing competitive workplace skills through improved services and better trained service providers.

On June 10, 1993 the Secretary published a notice of proposed priority for this program in the **Federal Register** (58 FR 32570).

Note: This notice of final priority does not solicit applications. A notice inviting applications under this program is published in a separate notice in this issue of the **Federal Register**.

Analysis of Comments and Changes

In response to the Secretary's invitation in the notice of proposed priority, five parties submitted comments. An analysis of the comments and of the changes in the priority since publication of the notice of proposed priority follows. Technical and other minor changes—and suggested changes the Secretary is not legally authorized to make under applicable statutory authority—are not addressed.

Comment: One commenter suggested that the Secretary remove the requirement that programs address at least two of the three service issues described in the background of the priority. This commenter noted that these issues span a range of student development and functional settings that would be difficult to bridge within the same project.

Discussion: The Secretary agrees that although it is possible to design projects that would bridge high school, postsecondary institutions, and places of work, this requirement could preclude other innovative programs focusing on one of these issues.

Changes: The priority has been changed to require that model demonstration projects address one or more of the three specific service issues described in the background of the priority.

Comment: One commenter stated that the priority seemed ambiguous in terms of programs for students with learning disabilities. The commenter indicated that programs should encourage and enable these students to access postsecondary experiences.

Discussion: While students with learning disabilities are not specifically listed in the priority, they are within the population of students with disabilities addressed by the priority.

Changes: None.

Comment: One commenter wrote that the service issue related to accommodating diverse learning styles in a range of academic settings is not necessary and recommended instead that the priority focus on teaching requisite antecedent behaviors.

Discussion: The Secretary agrees that improving the prerequisite skills of students entering postsecondary programs is important, and, for this reason, has identified the third service issue related to improving student potential for successful postsecondary experiences. However, concerns from disabled student service providers indicate that many faculty members are not aware of strategies to accommodate students with diverse learning needs in the entire range of academic offerings. This obligation was mandated by section 504 of the Rehabilitation Act of 1973, and was recently reinforced by the Americans with Disabilities Act. Therefore, the Secretary believes that it is important to offer faculty training and information on state-of-the-art techniques for accommodating students with disabilities in a variety of academic settings.

Changes: None.

Comment: One commenter described an imperative need for teacher retraining centers where teachers at all levels could be trained to remediate the deficits of students ages six through adult in reading, spelling, and mathematics.

Discussion: Teacher retraining centers for teachers at all grade levels is not within the statutory authority for this program, which addresses only postsecondary education. Further, although training postsecondary educators to remediate deficits in reading, spelling, and mathematics may be an important component of improved postsecondary opportunities, the Secretary believes that it is important to focus resources at this time in the areas described in the priority.

Changes: None.

Priority

Under 34 CFR 75.105(c)(3) the Secretary gives an absolute preference to applications that meet the following priority. The Secretary funds under this competition only applications that meet this absolute priority:

Priority—Model Demonstration Projects to Improve the Delivery and Outcomes of Postsecondary Education for Individuals with Disabilities

Background

This priority supports projects that develop, implement, evaluate, and disseminate new or improved approaches for serving the needs of students with disabilities in a variety of postsecondary settings. The intent of this priority is to improve the capacity of postsecondary institutions to reach out to and serve students with

disabilities and to improve the potential for successful postsecondary outcomes for these students. Projects supported under this priority would be major contributors of models or components of models for service providers in the field.

Although institutions of higher education have implemented measures to accommodate students with disabilities since the 1970's, longitudinal and follow-up studies of students exiting from secondary schools consistently show that fewer students with disabilities receive any type of postsecondary education than students without disabilities. Further, those students with disabilities who do attend postsecondary institutions are significantly less likely to complete their programs of studies or to be employed following their postsecondary experience. To change these outcomes, a number of specific barriers must be addressed, including the following:

Transferring of student accommodations to the employment setting. Students with disabilities who require classroom accommodations and adaptations to improve academic performance may require similar types of accommodations or adaptations on the job. In addition, specific jobs or professions may need additional accommodations or adaptations to successfully employ particular students with disabilities.

Thus, there is a need to develop strategies for helping students, placement specialists, and employers determine the accommodations or adaptations that would be required for professions or employment settings of interest to the student, and for transferring or arranging for those accommodations. This is likely to require cooperative efforts among representatives of the services responsible for successful vocational placements for people with disabilities. These collaborative efforts must include extensive involvement of representatives from an institution's program that provides support services to students with disabilities, the institution's career placement office, the State vocational rehabilitation (VR) agency (for VR-sponsored students), and business and industry.

Accommodating diverse learning styles in a range of academic settings. As the number and range of students with disabilities entering postsecondary institutions increase, there will be a continuing need for an institution's administration to accommodate or modify instructional strategies and classroom environments to promote improved participation and performance for these students. Thus, postsecondary institutions will have to work with individual faculty members and staff to implement the accommodations needed by particular students.

This is likely to require institutional strategies (1) to understand state-of-the-art practice in accommodating the full range of students with disabilities in traditional and emerging learning environments, and (2) to provide training on an on-going, as well as student-specific, basis to faculty or staff.

Improving student potential for successful postsecondary experiences. Some students with disabilities and their families may be unaware of the range of available postsecondary opportunities. Other students may be aware of these options but may not be prepared to benefit from postsecondary education. To increase the number of students with disabilities entering and successfully completing postsecondary education, there is a need to develop strategies for outreach activities to inform secondary special education teachers and counselors in secondary schools about the range of postsecondary opportunities available and how to work with students and families to understand and access these opportunities. Further, there is a need to develop or adapt programs such as Upward Bound and Talent Search that assist potential candidates to access postsecondary education.

Priority

A model demonstration project must—

(1) Develop and implement programs that address one or more of the three specific service issues described in the background of this priority;

(2) Develop and implement programs with specific project components or strategies that are based on theory, research, or evaluation;

(3) Produce detailed procedures and materials that would enable others to successfully replicate the model as implemented in the original site. Materials must include a manual or guide describing the components or strategies developed to address the specific issues; and

(4) Evaluate the model by using multiple outcome measures to determine the effectiveness of the model and its components or strategies, as well as a design that includes measures of multiple, functional student outcomes, other indices of the effects of the model, and cost data associated with implementing the model.

Competitive Priority

Within the absolute priority in this notice, the Secretary, under 34 CFR 75.105(c)(2)(i), gives preference to applications that meet the following competitive priority. The Secretary awards up to 10 points to an application that meets this competitive priority in a particularly effective way. These points would be in addition to any points the application earns under the selection criteria for this program:

Projects that would develop models for serving students with disabilities who are also members of minority groups (e.g., black, Hispanic, American Indian or Alaskan Native, Asian or Pacific Islander).

Intergovernmental Review

This program is subject to the requirements of Executive Order 12372 and the regulations in 34 CFR part 79. The objective of the Executive order is to foster an intergovernmental partnership and a strengthened federalism by relying on processes developed by State and local governments for coordination and review of proposed Federal financial assistance.

In accordance with the order, this document is intended to provide early notification of the Department's specific plans and actions for this program.

Applicable Program Regulations

34 CFR Part 338

Program Authority: 20 U.S.C. 1424a

(Catalog of Federal Domestic Assistance Number: Postsecondary Education Programs for Individuals with Disabilities 84.078)

Dated: September 9, 1993.

Richard W. Riley,

Secretary of Education.

[FR Doc. 93–22436 Filed 9–13–93; 8:45 am]

BILLING CODE 4000–01–P

federal register

Tuesday
September 14, 1993

Part VI

The President

Executive Order 12861—Elimination of One-Half of Executive Branch Internal Regulations

Executive Order 12862—Setting Customer Service Standards

Federal Register
Vol. 58, No. 176
Tuesday, September 14, 1993

Presidential Documents

Title 3—

The President

Executive Order 12861 of September 11, 1993

Elimination of One-Half of Executive Branch Internal Regulations

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 301 of title 3, United States Code, and section 1111 of title 31, United States Code, and to cut 50 percent of the executive branch's internal regulations in order to streamline and improve customer service to the American people, it is hereby ordered as follows:

Section 1. *Regulatory Reductions.* Each executive department and agency shall undertake to eliminate not less than 50 percent of its civilian internal management regulations that are not required by law within 3 years of the effective date of this order. An agency internal management regulation, for the purposes of this order, means an agency directive or regulation that pertains to its organization, management, or personnel matters. Reductions in agency internal management regulations shall be concentrated in areas that will result in the greatest improvement in productivity, streamlining of operations, and improvement in customer service.

Sec. 2. *Coverage.* This order applies to all executive branch departments and agencies.

Sec. 3. *Implementation.* The Director of the Office of Management and Budget shall issue instructions regarding the implementation of this order, including exemptions necessary for the delivery of essential services and compliance with applicable law.

Sec. 4. *Independent Agencies.* All independent regulatory commissions and agencies are requested to comply with the provisions of this order.

William J. Clinton

THE WHITE HOUSE,
September 11, 1993.

[FR Doc. 93–22649
Filed 9–13–93; 11:35 am]
Billing code 3195–01–P

Editorial note: For the President's remarks on signing this Executive order, see issue no. 37 of the *Weekly Compilation of Presidential Documents.*

Presidential Documents

Executive Order 12862 of September 11, 1993

Setting Customer Service Standards

Putting people first means ensuring that the Federal Government provides the highest quality service possible to the American people. Public officials must embark upon a revolution within the Federal Government to change the way it does business. This will require continual reform of the executive branch's management practices and operations to provide service to the public that matches or exceeds the best service available in the private sector.

NOW, THEREFORE, to establish and implement customer service standards to guide the operations of the executive branch, and by the authority vested in me as President by the Constitution and the laws of the United States, it is hereby ordered:

Section 1. *Customer Service Standards.* In order to carry out the principles of the National Performance Review, the Federal Government must be customer-driven. The standard of quality for services provided to the public shall be: Customer service equal to the best in business. For the purposes of this order, "customer" shall mean an individual or entity who is directly served by a department or agency. "Best in business" shall mean the highest quality of service delivered to customers by private organizations providing a comparable or analogous service.

All executive departments and agencies (hereinafter referred to collectively as "agency" or "agencies") that provide significant services directly to the public shall provide those services in a manner that seeks to meet the customer service standard established herein and shall take the following actions:

(a) identify the customers who are, or should be, served by the agency;

(b) survey customers to determine the kind and quality of services they want and their level of satisfaction with existing services;

(c) post service standards and measure results against them;

(d) benchmark customer service performance against the best in business;

(e) survey front-line employees on barriers to, and ideas for, matching the best in business;

(f) provide customers with choices in both the sources of service and the means of delivery;

(g) make information, services, and complaint systems easily accessible; and

(h) provide means to address customer complaints.

Sec. 2. *Report on Customer Service Surveys.* By March 8, 1994, each agency subject to this order shall report on its customer surveys to the President. As information about customer satisfaction becomes available, each agency shall use that information in judging the performance of agency management and in making resource allocations.

Sec. 3. *Customer Service Plans.* By September 8, 1994, each agency subject to this order shall publish a customer service plan that can be readily understood by its customers. The plan shall include customer service standards and describe future plans for customer surveys. It also shall identify the private and public sector standards that the agency used to benchmark its performance against the best in business. In connection with the plan, each agency is encouraged to provide training resources for programs needed by employees who directly serve customers and by managers making use of customer survey information to promote the principles and objectives contained herein.

Sec. 4. *Independent Agencies.* Independent agencies are requested to adhere to this order.

Sec. 5. *Judicial Review.* This order is for the internal management of the executive branch and does not create any right or benefit, substantive or procedural, enforceable by a party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.

William J. Clinton

THE WHITE HOUSE,
September 11, 1993.

[FR Doc. 93–22648
Filed 9–13–93; 11:39 am]
Billing code 3195–01–P

Editorial note: For the President's remarks on signing this Executive order, see issue no. 37 of the *Weekly Compilation of Presidential Documents.*

Reader Aids

Federal Register

Vol. 58, No. 176

Tuesday, September 14, 1993

INFORMATION AND ASSISTANCE

Federal Register

Index, finding aids & general information	202–523–5227
Public inspection desk	523–5215
Corrections to published documents	523–5237
Document drafting information	523–3187
Machine readable documents	523–3447

Code of Federal Regulations

Index, finding aids & general information	523–5227
Printing schedules	523–3419

Laws

Public Laws Update Service (numbers, dates, etc.)	523–6641
Additional information	523–5230

Presidential Documents

Executive orders and proclamations	523–5230
Public Papers of the Presidents	523–5230
Weekly Compilation of Presidential Documents	523–5230

The United States Government Manual

General information	523–5230

Other Services

Data base and machine readable specifications	523–3447
Guide to Record Retention Requirements	523–3187
Legal staff	523–4534
Privacy Act Compilation	523–3187
Public Laws Update Service (PLUS)	523–6641
TDD for the hearing impaired	523–5229

ELECTRONIC BULLETIN BOARD

Free **Electronic Bulletin Board** service for Public Law numbers, Federal Register finding aids, and a list of Clinton Administration officials. 202–275–1538, or 275–0920

FEDERAL REGISTER PAGES AND DATES, SEPTEMBER

46073–46528.....1
46529–46758.....2
46759–47014.....3
47015–47198.....7
47199–47370.....8
47371–47618.....9
47619–47820.....10
47821–47982.....13
47983–48258.....14

CFR PARTS AFFECTED DURING SEPTEMBER

At the end of each month, the Office of the Federal Register publishes separately a List of CFR Sections Affected (LSA), which lists parts and sections affected by documents published since the revision date of each title.

3 CFR

Executive Orders:
11858 (Amended by EO 12860).....47201
12775 (See DOT rule of Sept. 2).....46540
12779 (See DOT rule of Sept. 2).....46540
12860.....47201
12861.....48255
12862.....48257
Proclamations:
6587.....47199
6588.....47981

5 CFR

846.....47821
870.....47823
871.....47823
872.....47823
873.....47823
890.....47823
Ch. XXVI.....47619
Proposed Rules:
2634.....46096

7 CFR

246.....47015
Ch. III.....47206
400.....47203
406.....46073
915.....46759
946.....47025
947.....46760, 47025
948.....47025
953.....47025
955.....47023
958.....47025
982.....47025
989.....47028
1160.....46761
1220.....47983
1230.....47204
1962.....46074
Proposed Rules:
52.....47071
319.....47074
1007.....47653
1093.....47653
1094.....47653
1096.....47653
1108.....47653
1160.....46877
1405.....46886
1413.....46886
1755.....46097, 46110
1980.....46889

9 CFR

Ch. I.....47206
51.....47984
96.....47029
317.....47624
381.....47624
Proposed Rules:
78.....47222
82.....46569
92.....47084, 48003
94.....47834
113.....47222
313.....47673

10 CFR

860.....47984
Proposed Rules:
2.....48004
20.....47676
72.....47222, 48004
430.....47326

12 CFR

7.....46529
34.....46529
208.....47206
211.....46076, 47206
225.....47206
262.....47985
931.....47181
932.....47181
933.....47181
Proposed Rules:
3.....48206
208.....48206
215.....47400
325.....48206
620.....47836
936.....46569

13 CFR

107.....47031
121.....47371
Proposed Rules:
121.....46573, 47181

14 CFR

25.....46536, 47628
39.....46076, 46766, 46767, 46768, 46769, 46770, 46771, 46772, 47033, 47034, 47035, 47036, 47038, 47209, 47825, 47826, 47827, 47828, 47986
71.....46539, 47039, 47040, 47041, 47042, 47043, 47044, 47045, 47371, 47372, 47373, 47374, 47375, 47631, 47633, 47635, 47829, 47830
97.....47046, 47048
121.....46500
Proposed Rules:
Ch. I.....46585, 47405, 47678
39.....46135, 46136, 46137, 46139, 46914, 46916, 46917, 47085, 47224, 47225, 47227, 47405, 47407, 47409, 47678, 47837, 47839, 48009, 48010

71.....46586, 47087, 47411, 47413, 47680
382.....47681

15 CFR

770.....47052
771.....47049, 47051, 47052
774.....47052
775.....47051, 47052
776.....47052
777.....47049
778.....47049
779.....47049, 47052
785.....47051, 47052
799.....47049, 47322

Proposed Rules:
295.....46919

16 CFR

2.....47636

19 CFR

Proposed Rules:
175.....47413

21 CFR

206.....47948
207.....47948
310.....46744, 46746, 46749, 47948
314.....47340, 47948
330.....47948
510.....47056, 47376
520.....47216
522.....47376
556.....47210
558.....47056, 47962
573.....47962
804.....46514
807.....46514

Proposed Rules:
207.....46587
211.....47086
314.....47086
334.....46589
514.....47086
870.....46918

22 CFR

121.....47636

24 CFR

25.....47377
86.....47056
201.....47376, 47377
203.....47376
234.....47376

26 CFR

1.....45773, 46629, 46635, 47060, 47061, 47638, 47639, 47794

Proposed Rules:
1.....47013, 47089, 47090

27 CFR

47.....47631

Proposed Rules:
5.....46141

28 CFR

527.....47976

29 CFR

Proposed Rules:
1910.....47690
1915.....47690
1917.....47690
1918.....47690
1921.....47690
1928.....47690

30 CFR

913.....46645
914.....46857
935.....46861
948.....46676

Proposed Rules:
913.....47237

31 CFR

500.....47643
515.....47643
550.....47643
575.....47643
580.....46540, 47643
585.....47643

32 CFR

40.....47618

Proposed Rules:
199.....47692

33 CFR

100.....46078
117.....46080, 47067, 47068
161.....46081
165.....46078, 46082, 46083, 47069, 47987, 47988, 47989, 47990, 47991
334.....47786

Proposed Rules:
100.....47088
162.....46144
334.....47786

34 CFR

21.....47192
222.....46756
649.....47068

36 CFR

Proposed Rules:
242.....46678

38 CFR

3.....46665
21.....46665, 46666

Proposed Rules:
3.....46919
20.....47109

40 CFR

52.....46541, 46667, 47211, 47376, 47383, 47385, 47391, 47631
80.....46508
81.....47391
180.....46664, 46667, 47214, 47215
185.....46667
228.....46544
271.....47216
281.....47217
300.....46087
712.....47647
716.....47647

Proposed Rules:
Ch. I.....47414, 48012
52.....47101, 47103, 47239, 47414, 47415, 47701, 47705, 47707, 47840
122.....47845
123.....46145, 47417, 47845
131.....47845
132.....47845
148.....48092
180.....46147, 46149
260.....48092
261.....48092
268.....48092
271.....48092
372.....46596, 47709
721.....46921
745.....46921

41 CFR

101–49.....46088

Proposed Rules:
105–57.....46596

42 CFR

412.....46270
413.....46270

Proposed Rules:
417.....46925

43 CFR

3160.....47354

Proposed Rules:
5450.....47241
5460.....47847
5510.....47847
8360.....46151
9230.....47847
9260.....47847

44 CFR

3.....47216
206.....47992, 47994
353.....47996

45 CFR

400.....46089

Proposed Rules:
301.....47417
305.....47417
607.....46597
608.....46600
1207.....46602
1208.....46602

46 CFR

171.....47784

47 CFR

21.....46547
22.....46547
73.....46090, 46550, 46551
76.....46718
94.....46547
97.....47218

Proposed Rules:
73.....46152, 46605
76.....46737

48 CFR

232.....46091
252.....46091
522.....47398
552.....47398
1808.....47219
1852.....47219
2017.....47220
2052.....47220

Proposed Rules:
215.....47242
225.....47243
252.....47243
1815.....47244
1831.....47244
1852.....47244

49 CFR

107.....46872
171.....47650
172.....47650
173.....47650
174.....47650
179.....47650
571.....46551, 46873
585.....46551

Proposed Rules:
27.....47691
571.....46928, 46936, 47426, 47427
1312.....47104

50 CFR

661.....46093, 46091
663.....46094, 47651
672.....46095
675.....47221, 47633

Proposed Rules:
17.....46940, 47428, 47951, 48012
100.....46678
222.....47710
227.....46044, 47710
285.....46153
625.....47245
636.....46153
642.....47428
650.....46606
676.....46153

LIST OF PUBLIC LAWS

Note: No public bills which have become law were received by the Office of the Federal Register for inclusion in today's List of Public Laws.

Last List August 19, 1993

Order Now!

The United States Government Manual 1993/94

As the official handbook of the Federal Government, the *Manual* is the best source of information on the activities, functions, organization, and principal officials of the agencies of the legislative, judicial, and executive branches. It also includes information on quasi-official agencies and international organizations in which the United States participates.

Particularly helpful for those interested in where to go and who to see about a subject of particular concern is each agency's "Sources of Information" section, which provides addresses and telephone numbers for use in obtaining specifics on consumer activities, contracts and grants, employment, publications and films, and many other areas of citizen interest. The *Manual* also includes comprehensive name and agency/subject indexes.

Of significant historical interest is Appendix C, which lists the agencies and functions of the Federal Government abolished, transferred, or changed in name subsequent to March 4, 1933.

The *Manual* is published by the Office of the Federal Register, National Archives and Records Administration.

$30.00 per copy

Superintendent of Documents **Publications** Order Form

Order Processing Code:
* **6395**

Charge your order. It's easy! MasterCard VISA

To fax your orders (202) 512–2250

☐ **YES,** please send me _____ copies of the **The United States Government Manual, 1993/94** S/N 069–000–00053–3 at $30.00 ($37.50 foreign) each.

The total cost of my order is $_____. Price includes regular domestic postage and handling and is subject to change.

(Company or personal name) (Please type or print)

(Additional address/attention line)

(Street address)

(City State Zip code)

(Daytime phone including area code)

(Purchase order no.)

Please choose method of payment:

❑ Check payable to the Superintendent of Documents

❑ GPO Deposit Account ☐☐☐☐☐☐☐ – ☐

❑ VISA ❑ MasterCard Account

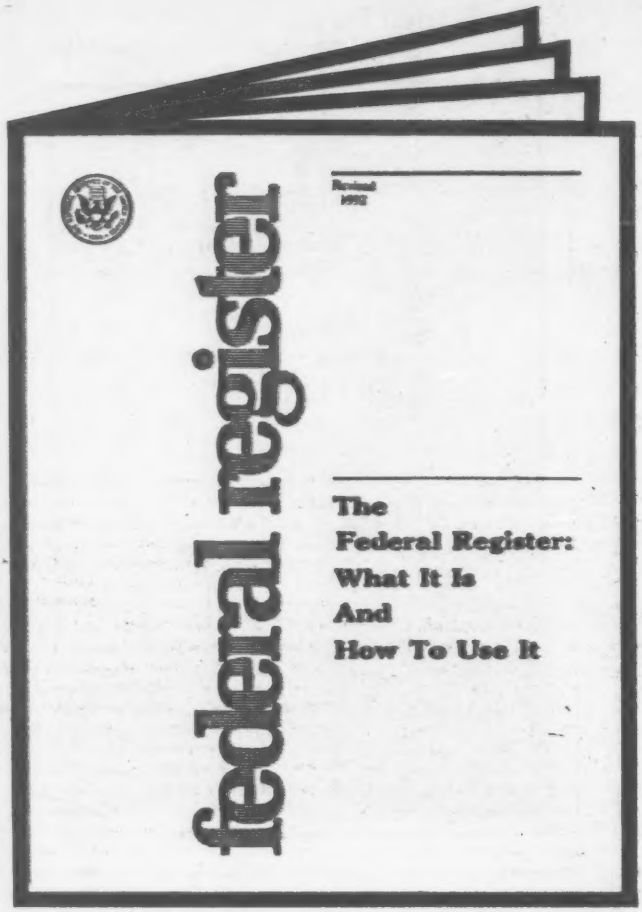
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

☐☐☐☐ (Credit card expiration date)

Thank you for your order!

(Authorizing signature) (Rev 9/93)

Mail to: Superintendent of Documents
P.O. Box 371954, Pittsburgh, PA 15250–7954



Announcing the Latest Edition

The Federal Register: What It Is and How to Use It

A Guide for the User of the Federal Register—Code of Federal Regulations System

This handbook is used for the educational workshops conducted by the Office of the Federal Register. For those persons unable to attend a workshop, this handbook will provide guidelines for using the Federal Register and related publications, as well as an explanation of how to solve a sample research problem.

Price $7.00

Superintendent of Documents **Publications** Order Form

Order processing code:
*6173

☐ **YES**, please send me the following:

Charge your order. It's Easy!
MasterCard VISA
To fax your orders (202)-512-2250

_____ copies of **The Federal Register-What It Is and How To Use It**, at $7.00 per copy. Stock No. 069-000-00044-4

The total cost of my order is $_____. International customers please add 25%. Prices include regular domestic postage and handling and are subject to change.

(Company or Personal Name) (Please type or print)

(Additional address/attention line)

(Street address)

(City, State, ZIP Code)

(Daytime phone including area code)

(Purchase Order No.)

May we make your name/address available to other mailers? YES ☐ NO ☐

Please Choose Method of Payment:

☐ Check Payable to the Superintendent of Documents
☐ GPO Deposit Account ☐☐☐☐☐☐-☐
☐ VISA or MasterCard Account
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
☐☐☐☐ (Credit card expiration date)

Thank you for your order!

(Authorizing Signature) (Rev. 1-93)

Mail To: New Orders, Superintendent of Documents
P.O. Box 371954, Pittsburgh, PA 15250-7954

Printed on recycled paper